

THE NRC FISCAL YEAR 2015 BUDGET AND POLICY ISSUES

HEARING BEFORE THE SUBCOMMITTEE ON ENERGY AND POWER OF THE COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES ONE HUNDRED THIRTEENTH CONGRESS SECOND SESSION

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THE NRC FISCAL YEAR 2015 BUDGET AND POLICY ISSUES

WEDNESDAY, MAY 7, 2014

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in Room 2322, Rayburn House Office Building, Hon. John Shimkus presiding.

Members present: Representatives Hall, Shimkus, Pitts, Terry, Burgess, Latta, McKinley, Kinzinger, Griffith, Barton, Upton (ex officio), McNerney, Tonko, Engel, Green, Capps, Barrow, and Waxman (ex officio).

Also present: Representative Johnson.

Staff present: Nick Abraham, Legislative Clerk; Charlotte Baker, Deputy Communications Director; Matt Bravo, Professional Staff Member; Leighton Brown, Press Assistant; Allison Busbee, Policy Coordinator, Energy and Power; Annie Caputo, Professional Staff Member; Tom Hassenboehler, Chief Counsel, Energy and Power; Brandon Mooney, Professional Staff Member; Chris Sarley, Policy Coordinator, Environment and the Economy; Peter Spencer, Professional Staff Member, Oversight; Jeff Baran, Democratic Senior Counsel; Alison Cassady, Democratic Senior Professional Staff Member; and Caitlin Haberman, Democratic Policy Analyst.

Mr. SHIMKUS. Let me call the subcommittee hearing to order and recognize myself for—first of all, welcome the Commissioners—and recognize myself for 5 minutes for the opening statement.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

We convene this hearing today to review the Nuclear Regulatory Commission's proposed budget for fiscal year 2015 and related policy issues. At the outset, let me welcome the Commissioners. I note that we have had some difficulty scheduling you all in past hearings, but the arrangements for this hearing went smoothly. Thank you for making yourselves available today.

The NRC plays a vital role in the safety of our Nation's civilian use of nuclear energy and technology, a role that I strongly support. The NRC, in fact, historically has represented the gold standard worldwide for nuclear safety regulation. In this context this hearing will help inform our oversight of how the NRC is performing the safety mission today amidst the current realities of nu-

clear power generation and whether its resources are used prudently.

Our Nation's nuclear plants are facing economic headwinds, struggling to compete with inexpensive natural gas in a time of decreased demand for electricity. Four reactors closed prematurely last year, and at least one will this year. Others may soon follow. The Department of Energy is currently analyzing the impact of one-third of our 100 reactors closing.

The NRC simply cannot ignore that its actions add to those economic headwinds. The NRC has acted on its most safety-significant post-Fukushima items called Tier 1, but it still has Tier 2 and Tier 3 to go. One utility has already estimated its post-Fukushima cost to be at least \$400 million.

As my colleague Mr. Johnson summarized so well in our last hearing, the NRC and the nuclear industry seem trapped in a pattern of ever-increasing costs, chasing even smaller increments in safety gains. This pattern is not sustainable. The NRC recovers 90 percent of its costs from fees charged to its licensees. The NRC's response to the closure of those four plants was simply to increase the fees on the remaining plants by over 20 percent and request 66 additional staff in their 2015 budget. As the size of our nuclear industry shrinks, the NRC cannot pretend that it needs more regulators to oversee fewer plants. This is another pattern that is not sustainable.

Ten years ago the NRC budget was \$626 million, 3,040 staff, and planned to review 1,500 licensing actions. In fiscal year 2015, the NRC budget was \$1.67 billion, 3,881 staff, and plans to review only 900 licensing actions. These licensing actions not only are safety related, but are often important to a nuclear plant's continued economic viability.

Yet in our December hearing, Chairman Macfarlane cautioned that if sequestration continued, and I quote, "nonemergency licensing activities," close quote, would be negatively impacted. So I would like to understand how, with 400 million more dollars and 800 more people, the NRC is struggling to review 40 percent fewer licensing actions.

Comparing today's NRC with the NRC of 10 years ago shows how management efficiency has degraded over the last decade. In 2004, the NRC expected the number of productive hours from their employees to be 1,776 per year. For fiscal year 2014, that number is 1,355, a decrease of 24 percent. In 2004, corporate support cost \$149 million and constituted 24 percent of the agency's budget. For fiscal year 2014, corporate support is now 46 percent, \$486 million, almost half of the NRC's total budget.

In nuclear safety, as with any regulation, a gold standard comes at a price, a price ultimately paid by the electricity consumers. The NRC simply must improve its financial discipline while continuing to deliver that gold standard. As the NRC's Principles of Good Regulation state, and I quote, "The American taxpayer, the rate-paying consumer and licensees are all entitled to the best possible management and administration of regulatory activities," and I close quote. The NRC should start by returning to its historic levels of efficiency.

And with that I yield back my time and recognize the acting ranking member of the committee, Mr. Green, for 5 minutes.

**OPENING STATEMENT OF HON. GENE GREEN, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. GREEN. I am glad I am not just a substitute.

Mr. Chairman, thank you for holding this hearing on the fiscal year 2015 NRC budget and policies. I would like to thank Chair Macfarlane and the other Commissioners for joining us this morning.

On March 11, 2011, an unforeseen, unpredictable natural disaster created the worst nuclear disaster since Chernobyl in Japan. The incident at Fukushima reactors reminded us what can go wrong but also created an opportunity to learn and implement new procedures and protections.

As a result of the Fukushima incident, many nations around the world curtailed the development and use of nuclear facilities. Germany and Japan moved rapidly towards natural gas and coal, in addition to wind and solar facilities, to offset the loss in power generation. Other countries have moved forward aggressively with new plants, including France and China. China has more than 30 plants under construction with more expected. The United States, for the first time in decades, we are moving forward with new nuclear facilities.

As we discuss lessons learned, and implement new standards, and look at long-term solutions to climate change, we must recognize that nuclear energy will play a critical role. The Nuclear Regulatory Commission has many responsibilities, most importantly protecting public health and safety. The Commission is also responsible for licensing and regulating our civilian nuclear power, including new designs.

As we look towards the future of nuclear power, it is important that the Commission balance safety and oversight with review and certification. The 21st century power-generation sector requires a 21st century regulatory scheme. The Commission needs to ensure its staff and procedures include enough flexibility and resources to encourage the development in the nuclear sector. Businesses require certainty from regulatory agencies to invest in the hundreds of billions of dollars necessary for the design and construction of the new facilities. The Commission must also retain the best people possible as new designs and new technology will test the limits of the old way of doing things.

Finally, the NRC must face significant challenge related to nuclear waste storage. While many on this committee, including myself, believe that Yucca Mountain would resolve many of these issues we face today, it is not a near-term solution. The temporary storage of spent nuclear fuel located in sites around the country must continue to be secured until a permanent solution can be found. The courts have issued decrees that require NRC to complete the safety evaluation review. It is my hope that this will be done expeditiously. The American people deserve to know about an investment that has approximately taken billions and why or why not the spent nuclear repository is or isn't feasible.

Our country is in the midst of an energy revolution that the revolution should provide us room to develop all sources of power. Rather than relying on other countries, we will have the ability to design, construct, and operate as many power-generation stations as necessary to meet our domestic needs. The power-generation sector is the backbone of our economy of which nuclear power is a key component. Let us make sure our regulatory agencies have the talent and resources required to help grow that sector.

And, again, I would like to thank Chair Macfarlane for appearing before the subcommittee. I look forward to your testimony.

Thank you, Mr. Chairman. I yield back my time.

Mr. SHIMKUS. Gentleman yields back the time.

The Chair now recognizes the chairman of the full committee, Mr. Upton, for 5 minutes.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Thank you, Mr. Chairman.

I appreciate the Commissioners returning to the subcommittee today. Chairman Macfarlane, I am also pleased that you are going to be returning to southwest Michigan to visit both of my two nuclear plants in the next couple of weeks.

We know that nuclear energy is an indispensable source of clean, reliable, affordable power; however, economic headwinds are challenging the viability of some plants, with four closing last year and more to follow.

Budgets are, indeed, a statement of policy. The NRC budget for fiscal year 2015 shows an increase in resources and staffing despite a shrinking fleet of reactors. This will no doubt be a topic of conversation today as we look at the short- and long-term plans for the agencies and realistic expectations for funding levels.

NRC's gold standard for nuclear safety oversight is essential, absolutely, and something that I strongly support. I believe that the NRC has appropriately responded to Fukushima with several new requirements addressing Tier 1 issues, the most safety-significant issues like the station blackout scenario and seismic hazard re-evaluations.

As the NRC turns its attention to Tiers 2 and 3, I think that it is appropriate for the agency to assess the safety benefits that will be realized by the implementation of the actions already taken and view these other, less safety-significant items accordingly. It is incumbent upon the NRC to ensure meaningful safety benefits that warrant any further requirements.

[The prepared statement of Mr. Upton follows:]

PREPARED STATEMENT OF HON. FRED UPTON

I appreciate the commissioners returning to the committee today. Chairman Macfarlane, I am also pleased that you will be returning to southwest Michigan in the coming weeks.

Nuclear energy is an indispensable source of clean, reliable, affordable power. However, economic headwinds are challenging the viability of some plants, with four closing last year and more to follow.

Budgets are statements of policy. The NRC budget for fiscal year 2015 shows an increase in resources and staffing despite a shrinking fleet of reactors. This will no

doubt be a topic of conversation today as we look at the short- and long-term plans for the agency and realistic expectations for funding levels.

The NRC's gold standard for nuclear safety oversight is essential and something I strongly support. I believe the NRC has appropriately responded to Fukushima with several new requirements addressing Tier 1 issues—the most safety-significant issues like the station blackout scenario and seismic hazard re-evaluations.

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Mr. UPTON. And I yield the balance of my time to Mr. Shimkus.
Mr. SHIMKUS. Thank you, Mr. Chairman.

I just want to remind my friend from Texas that we do have a long-term storage solution, and it is called the Nuclear Waste Policy Act, which is the law of the land.

But let me also take this moment to compliment the Commission's professional staff—and I hope that you would relate this to them—who are reviewing the Yucca Mountain license application. While the review was slow to start, and the Commissioners even slower in providing the detailed schedule that I requested, now that I have received it, I am pleased with the staff's progress so far. While they may be a bit behind on two chapters, they are ahead of schedule on others, and their rate of expenditures appears to be appropriate. I commend the staff's effort, and, again, I am referring to the staff, and I hope you will convey that to them, because staff doesn't get thanked as much as they should. Right, Mr. Sarley?

While many aspects of the NRC's budget deserve scrutiny, I find one item missing in the budget proposal to be the most noteworthy. The DC Circuit Court upheld the NRC's statutory mandate to review and issue a decision on the Yucca Mountain license application. The NRC has repeatedly stated it lacks the resources to do so. Their response to a question from this committee was, and I quote, "The DC Circuit Court of Appeals mandamus order does not include a requirement for the Commission to request additional funds," close quote. Unbelievable.

What is more, I asked the Commission to provide this committee with a cost estimate of the resources necessary to fill their mandate and issue a decision. The Commission failed to provide Congress with this information. Not surprising. So the Commission has refused to share its estimate as to what those resource needs are so that Congress will know how much to appropriate.

One would think that the agency faced with the plain reading of the statutory mandate, a court order upholding that statute, and a constitutional duty to cooperate with Congress' oversight function would seek clearly to do the right thing. Apparently the Commission doesn't feel compelled to fulfill its mandate, only to spend down to zero, and DOE appears supportive of that strategy.

In February, the Department of Energy notified the NRC that it would not prepare a supplement to the Yucca Mountain EIS regarding groundwater issues even after assuring this committee that it would. This appears to be an attempt to undermine completion of the safety and evaluation report by driving the NRC to

spread its scant resources even thinner. I urge the Commission not to take the bait.

The Commission was right to focus on completion of the safety and evaluation report as an important and achievable milestone. The NRC should not proceed to do DOE's work for them until having issued the safety and evaluation report.

And with that, I yield back the balance of my time, and I recognize the ranking member of the full committee, Mr. Waxman.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you very much, Mr. Chairman. I want to welcome the members of the NRC, and Chairman Macfarlane especially, and her colleagues.

The Nuclear Regulatory Commission has a lot of issues on its plate. Among them, the Commission continues to examine safety gaps revealed by the Fukushima nuclear accident in Japan, including the vulnerability of U.S. reactors to earthquakes. The Commission is examining the potential safety benefits of transferring more spent nuclear fuel from reactor pools to dry casks. And it is simultaneously overseeing and decommissioning five nuclear reactors and the construction of five new reactors, and we will explore those issues today.

But I want to focus on a subject that will be new to the members of this subcommittee, but one that I have been working on for years, the pervasive uranium contamination in and around the Navajo Nation in New Mexico, Arizona, and Utah. It is a modern American tragedy. For decades the Navajo Nation has been dealing with the deadly consequences of radioactive pollution from uranium mining and milling. During the Cold War, millions of tons of uranium ore were mined from the Navajo Nation in order to supply the Federal Government with the uranium yellowcake it needed to build a nuclear weapons stockpile. After the mining ended in the late 1980s, hundreds of radioactive mines were abandoned. The mining companies simply walked away without cleaning them up. Most mines were left wide open with no warning about the dangers they posed.

Over the years, open pit mines filled with rain, and Navajos used the unmarked pools for drinking water and to water their herds. Mill tailings and chunks of uranium ore were used to build foundations, floors and walls for some Navajo homes. Families lived in these radioactive structures for decades. Radioactive dust from abandoned mines and waste piles blew in the air. Navajo children played in the mines and the piles of radioactive debris.

This isn't something that happened in the distant past. Navajo kids were swimming in open-pit uranium mines in the 1990s, and people are still drinking contaminated water and breathing in radioactive dust today.

In 2007, the Oversight and Government Reform Committee held a hearing to examine this shameful legacy. There was bipartisan agreement that the Federal Government had a responsibility to right this wrong. At my request, five Federal agencies developed and implemented a 5-year plan to begin addressing the

uranium contamination. Over the last 6 years, these agencies, working with the Navajo, made significant progress in assessing the contaminated mines, rebuilding contaminated structures, providing safe water supplies, and cleaning up some high-priority sites, but a huge amount of work still remains.

At the top of that list is the cleanup of the Northeast Church Rock Mine near Gallup, New Mexico. Navajo families live close to the site, which holds an estimated 1 million cubic yards of radioactive mine waste. I raise this issue today because the NRC will soon be considering a proposal to dispose of this waste in a nearby mill site. The NRC must act expeditiously, while ensuring that the disposal is protective of human health and the environment.

Every day that passes is another day that Navajo families are exposed to radioactive mine waste. I believe the Commission needs to make this project a priority. I intend to ask about it at the hearing today to draw your attention to it again, and I look forward to hearing your testimony and discussing this issue further.

Thank you, Mr. Chairman. Yield back the time.

Mr. SHIMKUS. Gentleman yields back his time, and we want to welcome again the Commission. We will start with opening statements from all the Commissioners. The chairman will get 5 minutes. The rest of you will get 2 minutes for your statements. And now again we want to welcome Chairman Macfarlane, and you are recognized for 5 minutes.

STATEMENTS OF ALLISON M. MACFARLANE, CHAIRMAN, NUCLEAR REGULATORY COMMISSION; KRISTINE L. SVINICKI, COMMISSIONER, NUCLEAR REGULATORY COMMISSION; GEORGE APOSTOLAKIS, COMMISSIONER, NUCLEAR REGULATORY COMMISSION; WILLIAM D. MAGWOOD IV, COMMISSIONER, NUCLEAR REGULATORY COMMISSION; AND WILLIAM C. OSTENDORFF, COMMISSIONER, NUCLEAR REGULATORY COMMISSION

STATEMENT OF ALLISON MACFARLANE

Ms. MACFARLANE. Thank you.

Good morning, Ranking Member Waxman, Chairman Shimkus, and distinguished members of the subcommittee. My colleagues and I appreciate the opportunity to appear before you today to discuss the U.S. Nuclear Regulatory Commission's fiscal year 2015 budget request.

The NRC's fiscal year 2015 budget request provides the necessary resources for the agency to continue to meet its safety and security objectives. The NRC's proposed fiscal year 2015 budget is \$1.059 billion, an increase of \$3.6 million compared with the fiscal year 2014 enacted budget. Detailed information about the resource requests for each business line and areas of corresponding work is available in my written testimony and in the NRC's congressional budget justification.

The NRC faces a different future from what we anticipated just a few years ago. We continue to assess the internal and external environments and project the agency's expected workload and critical skills needs through 2020.

While there are fewer operating plants and large light water reactor applications, the NRC's workload has increased in other areas. We will be making a licensing decision on Watts Bar Unit 2, for example, transitioning to operational oversight for the new Vogtle and Summer reactors, preparing for small modular reactor design reviews, continuing to implement the Fukushima lessons learned and mitigating strategies, regulating the safe decommissioning of shutdown reactors, and continuing to address the court's remands on waste confidence and Yucca Mountain.

The NRC is also actively reducing overhead by centralizing administrative support services. Since 2010, the centralization has achieved a net reduction of approximately 37 million in constant dollars, a 17 percent decrease. Additionally, we are in the process of consolidating our personnel from satellite buildings into a single campus.

As you know, the NRC is required by law to collect approximately 90 percent of its budget in the year appropriated through fees from its licensees. The NRC accomplishes this requirement by collecting fees for services and annual fees. Last month the NRC published its fiscal year 2014 Proposed Fee Rule for public comment. The rule calls for an increase in the annual fees of \$945,000 per reactor compared to the fiscal year 2013 amount.

We recognize that both regulatory and fiscal stability are important to our licensees, and we seek to provide both. Annual fees for both fiscal year 2013 and 2014, however, depart from this goal, with the 2013 fees lower than average and the 2014 fees higher than average. The unusually low reactor annual fee in 2013 resulted from a combination of reductions imposed by budget sequestration and a refund to licensees resulting from an overcharge collected during a prior fee period.

We then entered fiscal year 2014, anticipating a sequestration-driven budget reduction that didn't materialize. To the contrary, and fortunately, we received our requested funding level. Because the agency received these funds midyear, and also as a result of changing industry schedules, our agency will not be able to execute this budget as originally planned; however, we must still bill licensees to collect the required 90 percent of our budget before the end of the fiscal year. This places the NRC and the industry in a difficult fiscal posture, which I hope can be remedied in subsequent fiscal years.

The NRC believes that the safety and security requirements we mandate will be most effective if they are paced appropriately so that licensees can maintain focus on safe operations. We are carefully working to understand and address any cumulative effects of our regulations, including implementation timelines for new or revised requirements commensurate with the priority associated with each action and the availability of resources.

We have enhanced public participation in our rulemaking process and have engaged the industry to perform case studies reviewing regulatory costs and schedule estimates. The Commission has directed staff to continue to develop and implement outreach tools to understand cumulative impacts and to assess the effectiveness of NRC's process enhancements.

As we continue to rise to the challenges presented by this time of transition, I am confident in the NRC's ability to develop and execute the strategies necessary to achieve our essential mission effectively and flexibly.

Thanks for the opportunity to appear before you today. I would be pleased to answer your questions.

Mr. SHIMKUS. Thank you.

[The prepared statement of Ms. Macfarlane follows:]

WRITTEN STATEMENT
BY ALLISON M. MACFARLANE, CHAIRMAN
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
HOUSE COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND POWER
MAY 7, 2014

Good morning, Chairman Upton, Ranking Member Waxman, Chairman Whitfield, Ranking Member Rush, and distinguished Members of the Subcommittee. My colleagues and I appreciate the opportunity to appear before you today to discuss the U. S. Nuclear Regulatory Commission's (NRC) Fiscal Year (FY) 2015 budget request.

As you know, the NRC is an independent Federal agency established to license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment. The NRC has formulated its Fiscal Year (FY) 2015 Congressional Budget Justification to support the agency's safety and security strategic goals and outcomes.

The NRC's safety strategic goal is to ensure adequate protection of public health and safety and the environment. The agency's safety program outcomes are to prevent the occurrence of any nuclear reactor accidents, inadvertent criticality events, acute radiation exposures, or significant releases of radioactive materials. The security strategic goal is to ensure adequate protection in the secure use and management of radioactive materials. The security program outcomes are to thwart attempts to sabotage licensed facilities or divert

special nuclear material, and to prevent any instances where licensed radioactive materials are used in a malicious manner.

To fulfill its responsibility to protect public health and safety, the NRC performs the following regulatory functions: developing regulations and guidance for applicants and licensees; licensing or certifying applicants to use nuclear materials, operate nuclear facilities, and decommission facilities; inspecting and assessing licensee operations and facilities to ensure that licensees comply with NRC requirements, and taking appropriate follow-up or enforcement actions when necessary; evaluating operating experience of licensed facilities and activities; and conducting research, holding hearings, and obtaining independent reviews to support regulatory decisions. I remain proud of the outstanding job that the NRC staff does on a daily basis to protect public health and safety.

SPECIFICS OF THE FY 2015 BUDGET REQUEST

The NRC's FY 2015 Congressional Budget Justification provides the necessary resources for the Nuclear Reactor Safety and Nuclear Materials and Waste Safety Programs to carry out the agency's mission and achieve the stated goals and desired outcomes for the American public. The NRC's proposed FY 2015 budget is \$1,059.5 million, which represents an increase of \$3.6 million when compared with the FY 2014 enacted budget.

The Office of the Inspector General's component of the FY 2015 proposed budget is \$12.1 million, and includes resources to carry out its mission to independently and objectively conduct audits and investigations to ensure the efficiency and integrity of NRC and the Defense

Nuclear Facilities Safety Board programs and operations and to promote cost-effective management.

Pursuant to the provisions of the Omnibus Budget Reconciliation Act of 1990, as amended, the NRC's FY 2015 budget provides for 90 percent fee recovery, less the amounts appropriated for (1) Waste Incidental to Reprocessing Activities under Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 and (2) generic homeland security activities. Accordingly, \$935.2 million of the FY 2015 budget would be recovered from fees assessed to NRC licensees. This would result in a net appropriation of \$124.2 million, which is a decrease of \$1 million in net appropriations when compared with the FY 2014 enacted budget.

NUCLEAR REACTOR SAFETY

The Nuclear Reactor Safety Program encompasses NRC efforts to license, regulate, and oversee civilian nuclear power, research, and test reactors in a manner that adequately protects public health and safety and the environment. This program also provides high assurance of the physical security of facilities and protection against radiological sabotage. This program contributes to the NRC's safety and security goals through the activities of the Operating Reactors and New Reactors Business Lines that regulate existing and new nuclear reactors to ensure their safe operation and physical security.

Resources requested in the FY 2015 budget for the Nuclear Reactor Safety Program are \$815.2 million, which represents an overall increase of \$3.8 million when compared with the FY 2014 enacted budget.

Operating Reactors

The Operating Reactors Business Line supports the licensing, oversight, rulemaking, international activities, research, and event response associated with safe and secure operation of 100 civilian nuclear power plants and 31 research and test reactors. The number of operating reactors decreased by the four (Kewaunee, San Onofre Units 2 and 3, and Crystal River 3) that have submitted letters notifying the NRC that they have permanently ceased operations. It also accounts for the announced closure of Vermont Yankee in October 2014, as well as the start of operation at Watts Bar 2 in FY 2015 if that is authorized by the NRC.

The FY 2015 budget request for Operating Reactors is \$577.3 million, which represents an overall funding decrease of \$12.8 million when compared with the FY 2014 enacted budget.

The major activities that the requested resources will support include the following:

- Continuing licensing activities for 100 power reactors. The NRC anticipates that the licensing workload will include completing 900 licensing actions (100 of which are Fukushima-related), including the review of approximately six power uprates and approximately 15 ongoing reviews of compliance with National Fire Protection Association (NFPA) Standard 805 for the approximately 25 reactors that will be transitioning to a risk-informed, performance-based set of requirements.
- Continuing Fukushima lessons-learned activities, including seismic and flooding hazard reevaluations.
- Licensee implementation and staff closeout reviews and inspections of mitigating strategies (MS) and enhanced spent fuel pool instrumentation orders. For the severe accident capable hardened vents order, the staff will be completing the safety evaluations for the licensee's Phase 1 integrated plans and monitoring licensee implementation. For the emergency preparedness activities, closeout and inspection efforts, materially linked with the MS order, will take place four months before the closeout of and inspection for the MS order.
- Continuing reviews for 11 license renewal applications (19 units at 12 sites) for operating reactors.
- Continuous oversight of plants through the NRC's Reactor Oversight Process to verify that the 100 operating nuclear power reactors continue to operate safely and securely.
- Review of 18 high-priority rulemakings and three medium-priority rulemaking activities directed by the Commission, including policy development activities related to the NRC regulatory framework after the Fukushima event.
- Research to address recommendations from the lessons-learned evaluation of the Fukushima accident, fire safety, digital and electrical systems, materials degradation,

reactor safety code development and analysis, radiation protection, probabilistic risk assessment, and evaluation of hazards from natural events.

- Ensuring that the NRC Headquarters Operations Center is staffed around the clock and able to collect and disseminate event response information and coordinate NRC response, as is consistent with the NRC's responsibilities for events involving NRC-licensed material under the National Response Framework.

New Reactors

The New Reactors Business Line supports the licensing, oversight, rulemaking, international activities, and research associated with the safe and secure development of new power reactors from design, site approval, and construction to operational status. The FY 2015 budget request for New Reactors is \$237.9 million, which represents an overall funding increase of \$16.5 million when compared with the FY 2014 enacted budget. The major activities that the requested resources will support include the following:

- Review of the eight combined operating license (COL) applications that remain active.¹
- Ongoing review of four design certifications (DCs) (Babcock & Wilcox mPower, U.S. Evolutionary Power Reactor, U.S. Advanced Pressurized Water Reactor, and Korea Hydro and Nuclear Power APR-1400), continue ongoing review of one DC renewal (Advanced Boiling Water Reactor), continuing pre-application activities for two projected DC applicants (Westinghouse and Holtec), and initiating the review of one new DC (NuScale).
- Construction inspection activities to support inspection of the reactors under construction (Vogtle Units 3 & 4, Summer Units 2 & 3, and Watts Bar Unit 2).
- Thirty vendor inspections to ensure integrity of the supply chain, which would be consistent with the expected increase in the number of suppliers and sites under active consideration.

NUCLEAR MATERIALS AND WASTE SAFETY

The Nuclear Materials and Waste Safety Program reflects the NRC's effort to license, regulate, and oversee nuclear materials and waste in a manner that adequately protects public health and safety and the environment. This program provides high assurance of physical

¹ Of the 18 total COL applications the NRC received, eight are under active review, two were issued licenses, six applicants requested that their reviews be suspended, and two applications were withdrawn.

security of the most risk-significant materials and waste and protection against radiological sabotage, theft, and diversion of nuclear materials. Through this program, the NRC regulates uranium processing and fuel facilities; research and pilot facilities; nuclear materials users (medical, industrial, research, academic); spent fuel storage; spent fuel and material transportation packaging; decontamination and decommissioning of facilities; and low-level and high-level radioactive waste. The program contributes to the NRC's Safety and Security goals through the activities of the Fuel Facilities, Nuclear Materials Users, Spent Fuel Storage and Transportation, and Decommissioning and Low-Level Waste Business Lines regulating byproduct, source, and special nuclear material.

Resources requested in the FY 2015 budget for the Nuclear Materials and Waste Safety Program are \$232.2 million, which represents an overall funding decrease of \$0.3 million when compared with the FY 2014 enacted budget.

Fuel Facilities

The Fuel Facilities Business Line supports licensing, oversight, rulemaking, international activities, research, generic homeland security, and event response associated with the safe and secure operation of various operating and new fuel facilities such as conversion, enrichment, and fuel fabrication facilities, and nuclear fuel research and pilot facilities. The FY 2015 budget request for Fuel Facilities is \$61.1 million, which represents an overall funding increase of \$6.2 million when compared with the FY 2014 enacted budget. The major activities that the requested resources will support include the following:

- Licensing actions for conversion/deconversion, enrichment, and fuel fabrication facilities, and possession of special nuclear material.

- Licensing support and reviews, including support to assist in the review of environmental reports and preparation of environmental impact statements, material control and accounting, safeguards, and criticality safety evaluations.
- Emergency preparedness licensing reviews for operating fuel cycle facilities.
- Environmental reviews for fuel cycle facility license applications, license renewals, amendments, and pre-application activities.
- Regulatory activities related to agency follow-up of the Fukushima event, including actions from the Fukushima Near-Term Task Force and inspections conducted under Temporary Instruction 2600/015, "Evaluation of Licensee Strategies for the Prevention and/or Mitigation of Emergencies at Fuel Cycle Facilities."
- Rulemaking in security-related areas, including enhanced security at fuel cycle facilities (CAT I and III), material categorization, the 10 Code of Federal Regulations (CFR) Part 26 Fitness for Duty Program, and fingerprinting for Safeguards Information access.
- Application of International Atomic Energy Agency safeguards to fuel cycle facilities, international coordination, and assistance on next generation safeguards designs.

Nuclear Materials Users

The Nuclear Materials Users Business Line supports the safe and secure possession, processing, handling, and use of nuclear materials (for the many and diverse uses of these materials) with associated licensing, oversight, rulemaking, international activities, research, generic homeland security, event response, and State, Tribal, and Federal Program activities. The FY 2015 budget request for Nuclear Materials Users is \$86.5 million, which represents an overall funding decrease of \$3.7 million when compared with the FY 2014 enacted budget. The major activities that the requested resources will support include:

- Completion of approximately 2,000 materials licensing actions (new applications, amendments, renewals, and terminations).
- Completion of approximately 900 routine health and safety inspections, reciprocity and reactive inspections, and a registration and follow-up inspection program for certain general licensees.
- Work on approximately 3 to 4 active materials waste safety rulemakings as well as continued interactive liaison with industry and professional societies to develop new codes and consensus standards and to address petitions for rulemaking submitted to the agency.
- Reviews and decisions on import/export authorizations of nuclear components and radiological materials, Executive Branch Subsequent Arrangements and Proposed 10 CFR Part 810 Licenses, control and tracking of imports and exports of sources, and bilateral and multilateral activities initiated for the exchange of technical information for the safe handling, storage, transport, and disposal of nuclear waste.

- Support of the Generic Homeland Security portfolio, which has integrated the three systems that license and track sources and radioactive materials under one management mechanism.
- Support for the Agreement State program to conduct 10 to 12 Integrated Materials Performance Evaluation Program reviews to ensure that Agreement State programs are adequate to protect public health and safety and are compatible with NRC programs; conduct outreach to one potential new Agreement State and process new agreements; process 50 Agreement State incidents/events; participate in, and coordinate State participation in, regulatory development; coordinate, and fund State participation in, NRC training courses (including Agreement State training and travel funds); respond to State technical assistance requests; respond to and coordinate responses to allegations about Agreement State licensees or regulatory programs; interact with the Conference of Radiation Control Program Directors, Inc., and the Organization of Agreement States, Inc. and develop and maintain policies and procedures for the program. This activity includes the statutory requirement for the NRC to make a determination that all applicable standards and requirements have been met before an uranium milling license termination by the Agreement State and that alternate standards, defined in Section 11e(2) of the Atomic Energy Act of 1954, as amended, are adequate before they are implemented by the Agreement State (1 or 2 cases per year).

Spent Fuel Storage and Transportation

The Spent Fuel Storage and Transportation Business Line supports the licensing, oversight, rulemaking, international activities, research, and generic homeland security associated with the safe and secure storage and transportation of spent nuclear fuel and other radioactive materials. The FY 2015 budget request for Spent Fuel Storage and Transportation is \$45.3 million, which represents an overall funding decrease of \$2.3 million when compared with the FY 2014 enacted budget. The major activities that the requested resources will support include:

- Review of approximately 65 radioactive material transportation package design applications and approximately 22 spent nuclear fuel (SNF) cask and facility applications, including initiating the review of the renewal of Certificate of Compliance storage applications to ensure the safe and secure storage of SNF.
- Renewal of the Prairie Island independent spent fuel storage installation (ISFSI) license and related environmental assessment support and legal advice and representation on SNF and radioactive material transportation matters.
- Completion of 16 regional and headquarters safety inspections of storage and transportation cask vendors, fabricators, and designers and of ISFSI pad construction, dry-run operations, initial loading operations, and routine operations.
- Continued identification and implementation of near term improvements to the storage and transportation licensing program including a comprehensive review of licensing guidance and regulations.

Decommissioning and Low-Level Waste

The Decommissioning and Low-Level Waste Business Line supports the licensing, oversight, rulemaking, international activities, and research associated with the safe and secure operation of uranium recovery facilities, removal of nuclear facilities from service and reduction of residual radioactivity to a level that permits release of the property and termination of the NRC license, and disposition of low-level radioactive waste from all civilian sources. The FY 2015 budget request for Decommissioning and Low-Level Waste is \$39.3 million, which represents an overall funding decrease of \$0.5 million when compared with the FY 2014 enacted budget. The major activities that the requested resources will support include:

- Licensing reviews for decommissioning 14 power and early demonstration reactors, seven research and test reactors, 23 complex materials facilities, and 38 uranium recovery facilities. Resources also support licensing for up to 40 military Naturally Occurring and Accelerator-Produced Radioactive Materials (NARM) sites and depleted uranium sites.
- Eight to 10 environmental and safety reviews (hearings included) for uranium recovery licensing applications as well as licensing activities associated with seven operating uranium recovery facilities.
- Oversight of decommissioning and uranium recovery inspections, Low-Level waste (LLW) program activities, and Waste Incidental to Reprocessing (WIR) activities at two U.S. Department of Energy sites.
- Research assistance on complex licensing cases, such as application of codes for decommissioning reviews and site reviews employing bio-remediation as the remediation process chosen for site cleanup at shallow sites with uranium contamination and *in situ* leach uranium recovery facilities.
- Continued maintenance of a framework of rules and guidance that promote compliance with safety principles and requirements, including development of a more risk informed approach for disposal of low level waste.

PROPOSED RULE TO ESTABLISH THE FY 2014 OPERATING REACTOR ANNUAL FEES

The Omnibus Budget Reconciliation Act of 1990 (OBRA 90) requires the NRC to collect approximately 90% of its budget *in the year appropriated* through fees from its licensees. Annual fees (10 CFR Part 171) are billed to the classes of NRC licensees to collect their recoverable budget not collected from fees for services (10 CFR Part 170). The changing

financial environment for the NRC Reactor Safety Program resulted in a low annual fee in FY 2013 (\$4.159 million) and a high annual fee in FY 2014 (\$5.104 million).

On April 14, 2014, the NRC published its FY 2014 Proposed Fee Rule in the *Federal Register* for public comment. The Proposed Rule calls for an increase in the annual fee of \$945,000 per reactor compared to the FY 2013 amounts. The FY 2014 Operating Reactor Annual Fees increased from the FY 2013 amount for three principal reasons.

First, the agency entered FY 2014 with funding uncertainty, prepared for a potential sequester, which would have significantly reduced anticipated NRC available resources, similar to the FY 2013 sequester-level funding. Fortunately, however, the sequester was not imposed and resources were appropriated to the NRC at essentially the requested level. Receiving this additional funding late in the year resulted in the NRC Reactor Safety Program realizing a recoverable budget increase of \$64.6 million, which equates to a proposed increase of approximately \$650,000 in annual fees per operating reactor from the FY 2013 level. These additional funds are not expected to be expended and billed in FY 2014 through fees for service work (10 CFR Part 170) and therefore must, by law, be recovered through annual fees *in the year appropriated*. Since the majority of the Reactor Safety Program budget must be collected from the 100 reactor licensees, this increased funding caused approximately 65% of the increase in the FY 2014 Proposed Annual Fees per reactor. It should be noted that some of these funds are expected to be recovered after FY 2014 through fees charged for services which could reduce future year annual fees.

Second, in FY 2013, there was a one-time prior-period collection resulting in an increase of \$20.9 million in collections of fees for services (10 CFR170). This additional collection caused a reduction in the FY 2013 annual fees, which will not recur during FY 2014. The lack of

this one-time increase in fees for services collections caused approximately 21% of the increase in the FY 2014 Proposed Annual Fees per reactor above the FY 2013 level.

Finally, in FY 2014, there are 100 operating reactors being billed annual fees, a decrease of two reactors from FY 2013 due to the permanent shutdown of San Onofre Nuclear Generating Station Units 2 and 3. This reduced reactor population from which to collect fees caused approximately 11% of the increase in the FY 2014 Proposed Annual Fees per reactor. An additional 3% of the increase is attributable to the margin for uncertainty.

ENSURING EFFICIENT USE OF RESOURCES

The NRC faces a different future from what we expected just a few years ago when substantial new reactor construction was projected, and no licensees had yet announced intentions to permanently cease operations at particular reactors. Anticipating a significant increase in demand for licensing services based on information provided by the industry, we responded with an aggressive effort to build staff capability and the infrastructure to support the projected workload increase. However, the workload has not materialized as anticipated. While the number of operating plants has decreased, the need for NRC engagement has grown in other unanticipated areas. We have therefore been adjusting NRC staffing in the nearer term to respond to these changing priorities. Implementing Fukushima lessons learned to further protect against an accident, addressing the two court mandates on the waste confidence rulemaking and resuming the development of the Safety Evaluation Report for the Yucca Mountain repository, and decommissioning of nuclear power reactors are examples of recently changing demands to which the agency has had to respond.

We have addressed these challenges by directing available resources to the highest-priority safety and security mission work. As the NRC moves toward a new environment, we

are reviewing our human capital requirements. Additionally, the NRC has adjusted its human capital strategies to ensure the agency is focused on personnel with essential critical skills as well as fine-tuning the skills of our employees to meet current and future mission needs. We also are continuing a robust effort to ensure that knowledge critical to the agency's mission is preserved.

We have an obligation to protect the public, respond to Congress, license and regulate the use of nuclear materials, and to do so in the most effective and efficient manner. In light of the reality that our agency is on the cusp of a different future than we expected just a few years ago, it is appropriate that for the longer term, we examine the size and organizational structure of our workforce. Accordingly, the Executive Director for Operations has initiated a fresh and realistic look at each of the business lines and where the agency will be in five years. The Commission will be working with the NRC staff to continue to adjust, refine, and redirect human capital, hiring, and succession planning strategies as appropriate.

The staff has been assembling a "best estimate scenario" of the NRC in 2019 that, among other things, includes a thorough understanding of where we will be in the new large light water reactor application and review process, a realistic view of what advanced reactors will have applications under review or be in construction, a best estimate of the size of the operating fleet, a vision for our other key program areas, and an assessment of our various corporate support functions. This information can facilitate the development and execution of the strategies necessary to achieve our mission, while continuing to monitor the internal and external environments, and also working to enhance our agility and organization capacity. We understand the need to be proactive about our future, addressing challenges as they arise, and maintaining a focus on the mission.

Finally, and very importantly, we have been actively streamlining the agency's support functions and overhead drivers. Over the past five years, for example, we have taken steps to reduce overhead by centralizing the delivery of administrative support services. Because of these efforts our FY 2015 budget reflects a reduction of \$7 million in overhead from FY 2014 alone. Overall, our efforts to control agency costs have resulted in a net reduction of 192.4 FTE in support personnel, which equates to approximately \$37.2 since 2010 in constant dollars, or a 16.8% decrease. Additionally, we are in the process of consolidating our personnel from satellite buildings into a contiguous three-building campus. This effort has caused some efficiencies and avoided costs but we are still adjusting the placement of functions and these actions will determine out-year savings.

UNDERSTANDING THE CUMULATIVE EFFECTS OF REGULATION

The Atomic Energy Act mandates the NRC to protect public health and safety, and the requirements the NRC imposes are intended to meet this mandate. We recognize that important safety and security enhancements will be most effective if necessary, regulatory measures are paced appropriately so that licensees can maintain focus on ensuring day-to-day safety and security. To ensure that our regulatory programs have the intended effect and that we are being an efficient and effective regulator, we are carefully working to understand and address, as needed, any cumulative effects of our regulations.

In particular, we are interacting closely with various groups, including industry, government, and members of the public, to ensure that we understand and manage the impacts on licensees of regulatory initiatives and activities that are being implemented concurrently. We are addressing implementation timelines for new or revised regulations, the priority associated with each action, and the availability of critical skills to complete implementation.

The NRC has also engaged the operating reactor industry to perform 'case studies' reviewing regulatory cost and schedule estimates. In addition, we are working with other parts of the regulated community and with our Agreement State regulatory partners to assess and control cumulative effects. The NRC has received feedback from industry indicating that estimating costs is difficult and that the industry is challenged to provide feedback on NRC's costs estimates during the development of a proposed regulatory requirement that is still in formulation. On the other hand, we believe industry acknowledges that it needs to providing provide better cost estimates to NRC at the appropriate points in the regulatory process. The NRC has put in place enhancements made to the rulemaking process since 2011.

The NRC is also currently exploring applying those enhancements to other processes, such as a process that would further permit licensees to propose plant-specific adjustments to priorities and schedules based on risk significance.

Chairman Upton, Ranking Member Waxman, Chairman Whitfield, Ranking Member Rush, and distinguished Members of the Subcommittee, this concludes my formal testimony on the NRC's FY 2015 budget request. On behalf of the Commission, thank you for the opportunity to appear before you. I look forward to continuing to work with you to advance the NRC's important safety and security missions. I would be pleased to respond to any questions that you may have. Thank you.

Mr. SHIMKUS. The Chair now recognizes Commissioner Svinicki for 2 minutes. Welcome.

STATEMENT OF KRISTINE L. SVINICKI

Ms. SVINICKI. Good morning, Chairman Shimkus and members of the subcommittee. Thank you for the opportunity to appear before you today at this hearing to examine the NRC's fiscal year 2015 budget request. The Commission's Chairman, Dr. Allison Macfarlane, in her statement on behalf of the Commission has provided key specifics of the agency's budget request and how these activities are intended to support the stated goals and outcomes of the NRC's strategic plan and to advance the NRC's important missions.

In light of her detailed statement, I will address only two brief areas of current focus. The first area is the NRC's effort to better align the application of its resources within each budget line with the work in front of us. Chairman Macfarlane's written statement describes the changes that have occurred in our projected regulatory workload and refers to an ongoing initiative led by NRC's Executive Director for Operations to take a hard look at each business line in the NRC's budget and propose adjustments to the application of both human capital and resources to better reflect not where we planned on being, but where we actually are in terms of budgets and programmatic activities.

This review is a matter of high agency importance. I will be working with my colleagues in the coming months to reflect the outcomes of this exercise in both fiscal year 2016 budget formulation as well as current-year and near-term budget implementation where permissible within agency authorities and beneficial to overall efficiency.

The second area is the cumulative impact of the NRC's activities on the regulated community and on the energy infrastructure of the Nation. Later this month our Commission will convene in a joint public session with the Commissioners of the Federal Energy Regulatory Commission. Among the topics we plan to receive expert testimony on is that of the dynamics that may be affecting the viability of the continued operation of nuclear power plants. It is my sense that both of our independent regulatory Commissions seek to better understand how a wider set of influences is altering the energy landscape and, more importantly, for our two Commissions in ways that may not be readily reversible.

Mr. Chairman, and members of the subcommittee, I thank you for the opportunity to appear today and look forward to your questions.

Mr. SHIMKUS. Thank you very much.

Now we turn to Commissioner Apostolakis and welcome you, and you are recognized for 2 minutes.

STATEMENT OF GEORGE APOSTOLAKIS

Mr. APOSTOLAKIS. Good morning, Chairman Shimkus, and distinguished members of the subcommittee.

I concur with Chairman Macfarlane's statements that we understand the need to be proactive about our future. I would like to offer a few observations regarding improvements to the infrastruc-

ture and regulatory framework of the agency in the next 10 to 15 years that, in my view, will most effectively ensure safety and security in an efficient manner.

Regarding the agency's future infrastructure, I support the vision of our Advisory Committee on Reactor Safeguards, ACRS, when it says, quote, "The ACRS can foresee, for example, a time when regulatory staff have routine access to superior analysis tools for systems analysis, fundamental logical analysis, and risk assessment," end of quote. The development of such tools requires dedicated resources.

Regarding the regulatory framework itself, I believe that any future revisions should build upon well-established practices, such as the defense-in-depth philosophy and risk-informed and performance-based approaches. After the Fukushima accident, there were many recommendations for regulatory action. Without the benefit of quantitative risk metrics, it was difficult to explain the basis for our prioritization of the Fukushima recommendations or how the prioritization of these new activities was being integrated with all other very important agency activities, such as fire protection. We should take the time to develop the infrastructure improvements that we envision for the future. Unfortunately, long-term planning is often neglected during periods of difficult budgetary adjustments. It is often not until an accident occurs that we realize how very useful it would have been to have these tools, but it is then too late.

In closing, I would say that if we want a more effective and efficient regulatory commission in place 10 to 15 years out, we need to invest the resources necessary today. We need to develop a vision in investing the necessary infrastructures so that the appropriate tools will be available when we need them. Thank you.

The Chair now recognizes Commissioner Magwood for 2 minutes.

STATEMENT OF WILLIAM D. MAGWOOD IV

Mr. MAGWOOD. Thank you, Chairman Shimkus, and good morning. Good morning to you and members of the subcommittee and the committee. I thank you for the opportunity to speak to you today about our fiscal year 2015 budget request and related policy issues. As the Chairman's statement has already highlighted important aspects for our budget request and our ongoing activities, I will only add a few brief comments.

First, I note that in the 3 years since the Fukushima Daiichi accident in Japan, I have seen nothing that would make me question the safety of the U.S. nuclear power plants. Since March of 2011, we have analyzed a vast array of technical issues, debated numerous complex regulatory policies, and engaged in an open public discussion about the lessons learned from the accident. After all that, the essential conclusion reached by the Near Term Task Force in the months after the accident remains inviolate: U.S. Nuclear power plants are safe.

But I think it is important to emphasize the reason that our plants are safe. The reason is that in the United States, both the regulator and the regulated community places very high value in responding to operating experience. U.S. plants are safe because we have learned from six decades of operation and because we learned

from TMI and from 9/11. We can do no less in learning from the Fukushima experience.

As a result we have taken clear, specific actions based on lessons learned. I believe the changes we have made thus far are appropriate and balanced, and I believe the steps that we and our licensees have taken have already made U.S. Plants more resilient, and further enhancements will be completed over the next few years.

I will look forward to watching NRC's progress on these issues; however, as you know, I was the U.S. Government's candidate to serve as the next Director General of the OECD Nuclear Energy Agency, and I was selected formally for that position in March. I take up that new post in September and will therefore step down from this Commission this summer. Since this is most likely my final appearance as an NRC Commissioner before this committee, I take the opportunity to thank you for the serious and thoughtful manner in which this panel has overseen NRC's work since my tenure began. I very much appreciate the fact that you care so deeply about the important issues under NRC's jurisdiction, and that you have always engaged us with fairness and balance. We are a better regulator because of your oversight.

Thank you for the opportunity to appear before you today, and I look forward to any questions you may have.

Mr. SHIMKUS. Thank you, and I think we will get a chance to visit before whenever that magical date is, and we want to thank you for your service.

Now the Chair recognizes Commissioner Ostendorff for 2 minutes.

STATEMENT OF WILLIAM C. OSTENDORFF

Mr. OSTENDORFF. Thank you, Chairman Shimkus and members of the committee.

As this is a budget hearing, I will comment that I think that we have tried to use the best available information we had in hand in order to project our future workload and our licensing activities.

In my experience, we have been successful in executing our oversight responsibilities and responding to challenges such as Fukushima, growing cybersecurity threats, and extended shutdowns of facilities such as the Fort Calhoun station in Nebraska and Honeywell's Metropolis facility in southern Illinois. However, as with all predictions, our budget estimates for future work are not always on the mark. Accurately budgeting for Fukushima work has been a significant challenge for this Commission and this agency, especially in areas where the work has evolved once it started.

As the Chairman commented, we have made some changes to our structure over the last few years. I think those are good changes. I will also note that the nuclear industry and the landscape is very different from where it was 5 years ago. I think the agency must adapt to these changed circumstances and right-size accordingly. I am committed to helping ensure this occurs with my colleagues.

I fully support the Chairman's written testimony in addressing the best estimate scenario for the NRC workload in the year 2019. I appreciate this committee's oversight role and look forward to your questions.

Gentleman yields back his time, and I thank you, and I recognize myself for 5 minutes for my opening questions.

I want to start with Chairman Macfarlane. Under the Atomic Energy Act of 1954 and Energy Reorganization Act of 1974, the NRC is required to provide safety oversight of its licensees, correct?

Ms. MACFARLANE. That is correct.

Mr. SHIMKUS. Still directed to the Chairman Macfarlane, do you feel the NRC's fiscal year 2015 budget proposal requests the funds necessary to execute that responsibility?

Ms. MACFARLANE. I do, yes.

Mr. SHIMKUS. Chairman Macfarlane, were there any court decisions issued last year requiring you to request the necessary funds to carry out those responsibilities?

Ms. MACFARLANE. Any court decisions last year, being 2013?

Mr. SHIMKUS. Correct.

Ms. MACFARLANE. That required us to—sorry?

Mr. SHIMKUS. To carry out your responsibilities.

Ms. MACFARLANE. To request additional funds. No, there were not any court decisions last year that required us to request additional funds.

Mr. SHIMKUS. The DC Circuit Court affirmed that the Nuclear Waste Policy Act, and I quote, “provides that the Nuclear Regulatory Commission, and I”—in quotation—“shall consider the Department of Energy's license application to store nuclear waste at Yucca Mountain and”—and I quote again—“shall issue a final decision approving or disapproving that application.” The court went on to observe, and I quote again, “yet the Commission still has not issued the decision required by statute.”

In the case of Yucca Mountain, the NRC has statutory requirement, but you don't request funding to carry it out because the court didn't order you to. In the case of your safety oversight responsibility, you request the necessary funding without a court ordering you to do.

Chairman Macfarlane, can you describe for me the process the Commission uses to decide which statute you require a court order prior to the Commission requesting the necessary funds to carry out its responsibilities?

Ms. MACFARLANE. Let me explain about the Yucca Mountain situation. We received an order from the court, remand, requiring us to continue the licensing process with our existing funds. We have done so. We are following the law. We are in the process of completing the safety evaluation report and the environmental impact statement—

Mr. SHIMKUS. Let me reclaim my time. The question is this: Can you describe for me the process the Commission uses to decide which statutes require a court order prior to the Commission requesting the necessary funds to carry out its responsibilities?

Ms. MACFARLANE. The Nuclear Waste Policy Act requires us to hold hearings. It says, and I quote, “Nothing in this act shall be construed to amend or otherwise detract from the licensing requirements of the NRC,” end quote. So our licensing requirements that deal with proceedings for developing a repository, 10 CFR Part 2, Subpart J, require us to follow Rule 2.325, which says, the—

Mr. SHIMKUS. Let me reclaim my time because we are running out of it, and you are not answering the question.

Let me go to each Commissioner. Do you support including funding a request to continue the Yucca Mountain license review in the NRC's budget proposal?

Ms. MACFARLANE. I do not because the applicant—

Mr. SHIMKUS. OK. The answer is no.

Commissioner Svinicki?

Ms. SVINICKI. I do support seeking funding and have done so as part of the Commission's deliberations on the budget.

Mr. SHIMKUS. And we are going to pass you up, Mr. Apostolakis. Commissioner Magwood?

Mr. MAGWOOD. Currently the Commission has been looking at having the staff perform an analysis to tell us what is actually required to request in terms of actually conducting such an activity. I haven't seen that yet, so I reserve judgment until I see that.

Mr. SHIMKUS. What does that mean?

Mr. MAGWOOD. I don't know how much would be needed.

Mr. SHIMKUS. But if you knew how much was needed, you would assume that there would be a request for it?

Mr. MAGWOOD. I am willing to look at it.

Mr. SHIMKUS. Commission Ostendorff?

Mr. OSTENDORFF. Chairman Shimkus, as I testified before this committee back in December of 2013, I have supported funding for continuing Yucca Mountain licensing activities. I took that position during our OMB passback process with the 2015 budget. That position did not prevail with the Commission.

Mr. SHIMKUS. OK. So then the final question, the Commissioners have failed to request—you all have failed to request additional funding for the license review, and very little funding will remain after the actions already ordered by the Commission have been completed.

Final question: Will you commit to oppose expenditures on any activities other than in support of the work already underway until the SER, Safety and Evaluation Report, is ready to be published?

Ms. MACFARLANE. Will we commit to opposing?

Mr. SHIMKUS. In other words, the money going in different directions without finishing the money to comply with the law as required by the Federal courts.

Ms. MACFARLANE. We have ordered the staff to complete the SER, complete the EIS, put the material from the licensing support network—

Mr. SHIMKUS. So you are going to make sure the funding is available for them to finish the job.

Ms. MACFARLANE. And we have ordered the staff to tell us if they think the funding is not available.

Mr. SHIMKUS. So the answer is yes. So the answer is yes. Thank you.

Commissioner Svinicki?

Ms. SVINICKI. Yes. That is our standing direction.

Mr. SHIMKUS. Commissioner Magwood?

Mr. MAGWOOD. Yes.

Mr. SHIMKUS. I guess—

Mr. APOSTOLAKIS. Yes.

Mr. SHIMKUS. OK. Great.

Mr. OSTENDORFF. Yes. I will add that I think we have appropriate internal controls in place to ensure that the funding is there to complete the SER.

Mr. SHIMKUS. And I guess we are going to be able to find that out, so we thank you.

The Chair now recognizes the ranking member Mr. Green for 5 minutes.

Mr. GREEN. Just briefly, is there a time frame of when that will be available?

Ms. MACFARLANE. When what will be available?

Mr. GREEN. When the completed EIS—

Ms. MACFARLANE. The completed SER should be available January 2015.

Mr. GREEN. OK. Thank you.

There was considerable discussion among policymakers, you heard in the opening statements, in the industry related to NRC's budget. Industry fees have increased. The NRC's fiscal year 2015 budget has increased, and staff has increased, but the number of operating reactors and material licenses have declined.

I am concerned that forward-looking technology is not receiving the level of attention it may deserve. I am further concerned that most of the majority of the Commission's resources are being devoted to more than 50 rulemakings.

Chairman Macfarlane, can you provide a sense of why the Commission has 50 high-priority rulemakings underway?

Ms. MACFARLANE. We have a number of rulemakings underway, that is correct. I want to point out that we don't have fewer licensees right now. We do have shut-down reactors, but we don't have fewer licensees. We have thousands and thousands of licensees. So I just want to be clear on that.

We now know that we face a different future than we expected a few years ago, and we are working very diligently to adjust our future budgets to this new reality. A few years ago we had 18 combined operating license applications. We now have eight. A few years ago we had a number of operating reactors. We now have a reduced number of operating reactors. We and the industry did not foresee this coming because we rely on industry estimates to develop our budget.

Mr. GREEN. OK. Can you provide a sense of what percentage of the Commission's budget and fees fund these rulemakings?

Ms. MACFARLANE. I will take that for the record, and I will get that number to you.

Mr. GREEN. OK. I appreciate it.

[The information appears at the conclusion of the hearing.]

Mr. GREEN. For the panel, small modular reactors technology holds the promise of scalable and cost-effective and inherently safer nuclear power for the future. SMR is a technology that can play a key role in our energy future. However, I am concerned that the NRC lacks the flexibility and has not dedicated adequate resources to the next generation of technologies. Does the growth in fees and staff of the NRC indicate a focus on the small modular reactors in the next-generation technology?

Ms. MACFARLANE. Let me assure you, Congressman, we have been working very hard to prepare ourselves, and to prepare the industry, for small modular reactor design certification applications. We have been working with the vendors and the manufacturers to make sure they understand our regulations and that they are prepared. We have developed guidance for them. We have been working very closely with them.

Mr. GREEN. Any other responses from the Commissioners?

Mr. OSTENDORFF. I agree, Congressman, with the Chairman's statement. I think we are waiting for industry to submit these applications to our staff. We are ready.

Mr. GREEN. Businesses involved in these SMR technology require certainty to make the investments and secure capital. This requires the NRC to prioritize and focus on these SMR applications. The NRC has published a 39-month schedule for smaller reactor design certification reviews. In order to achieve the schedule, the NRC must resolve a number of issues. What is the NRC doing to ensure that the Commission meets the 39-month schedule?

Ms. MACFARLANE. We are—as I said, we are working very hard on this. Unfortunately, we are hearing from the industry that they are slowing down their plans for submitting license applications, and so we are having to adjust our schedules, too.

Mr. GREEN. Do you know how many license applications you have now?

Ms. MACFARLANE. We don't have any.

Mr. GREEN. None at all?

Ms. MACFARLANE. None at all. We were expecting two in 2014, and they have been pushed back to either 2015, or 2016, or indefinite.

Mr. GREEN. Do you know, do they give you a reason for why?

Ms. MACFARLANE. They don't have adequate financing right now, and they don't have adequate customers.

Mr. GREEN. And do you think that reason is because, you know, of course natural gas is historically low. Do you think it is just the market conditions?

Ms. MACFARLANE. You know, we are a safety regulator. The Department of Energy is the agency working with the industry to develop these new designs.

Mr. GREEN. OK. Thank you, Mr. Chairman. I yield back.

Mr. SHIMKUS. The gentleman yields back his time.

The Chair now recognizes the chairman emeritus, Mr. Barton, for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman, and thank our NRC Commissioners for being here. Mr. Magwood, we wish you the very best in your next position. We will miss you, but I doubt that you will miss us.

I have a little bit different view than Chairman Shimkus of Yucca Mountain. I do want Yucca, if it is shown to be safe. I want it to be the final repository and the permanent repository, and I want the NRC to expedite its review and complete it, and I hope that the review is positive, positive in the sense that it says it is safe to store our high-level nuclear waste there for whatever time we need to. So I am pro-Yucca Mountain, but I am not Yucca Mountain or nothing.

The State of Texas is moving along at the legislative level and at the local level to come up and support an interim storage facility if and when the NRC decides to move that way. And, again, I want to emphasize that I would rather do Yucca, I would rather do it sooner, I would rather have it permanent, and let's get on with it.

So there is no daylight between Chairman Shimkus and myself on that, but if we are not going to do Yucca, or if Yucca is going to take a long, long time, or some other permanent repository other than Yucca is going to be reviewed, I am not an opponent of doing interim storage.

So my first question, and I will go to the Chairwoman, in your opinion is it either/or, we either do permanent at Yucca or do nothing, or could we have a parallel path that involved interim storage while we are reviewing Yucca?

Ms. MACFARLANE. Thanks for the question, Congressman. We at the NRC don't set policy for the Nation on its plans for nuclear waste disposal. So right now we have the Nuclear Waste Policy Act that is the law of the land, and that is controlling what happens. Personally, as a former Blue Ribbon Commission member, we endorsed following parallel tracks.

Mr. BARTON. OK. Any of the other Commissioners want to address that question? Mr. Magwood, you don't have anything to lose.

Mr. MAGWOOD. You always have something to lose, Congressman.

My view is that whatever solution is found, whether an interim solution or a final solution, it will take time, and as has already been mentioned by the panel, our biggest responsibility is to make sure that the spent fuel is safely stored where it is now. So I think the NRC's attention is best placed today on assuring the spent fuel pools and dry cask storage are implemented as safely and effectively as possible, and I have put my focus on that. For the longer term, there are still a lot of decisions to be made nationally, so we will just have to see.

Mr. BARTON. OK. What is the best case—if the review at Yucca is completed in a timely fashion, and if it is shown to be safe to store permanently our high-level waste there, when would we actually begin to move waste to Yucca, best case? And, again, anybody can answer that.

Ms. MACFARLANE. You know, again, this is not in our purview. You would have to ask the applicant who—

Mr. BARTON. I am not asking—just a general ballpark. The next 5 years, next 10 years?

Ms. MACFARLANE. No. I think you are looking at a long time frame.

Mr. BARTON. Longer than that?

Ms. MACFARLANE. Yes, I would imagine.

Mr. BARTON. OK. My last question I will go to Commissioner Ostendorff. Are you former military?

Mr. OSTENDORFF. Yes, sir. I served in the submarine force.

Mr. BARTON. I kind of figured that.

What do we do with the high-level waste at plants that we are decommissioning, and we have decommissioned several? Do they stay on site, the waste, or does it move to another active site owned by the same utility?

Mr. OSTENDORFF. The Naval Reactors Program has cognizance over the spent fuel from decommissioned aircraft carriers, nuclear cruisers and submarines. That fuel has been removed to the Idaho facility.

Mr. BARTON. No. I am talking about a commercial reactor that has been decommissioned in the private sector. Some of our plants are being deactivated. I am sorry I didn't—

Mr. OSTENDORFF. I am sorry. That fuel currently is still on site.

Mr. BARTON. Even though the plant doesn't work anymore, you keep it on site in the pool or in the cask storage, I guess?

Mr. OSTENDORFF. That is correct.

Mr. BARTON. And how long can we do that?

Mr. OSTENDORFF. That is the subject, quite frankly, of our ongoing waste conference decision that we are addressing right now as an agency, because that is a pending adjudication from the DC Circuit Court of Appeals. I can't really make a statement that directly answers your question, but I would say that my personal view is that we believe that spent nuclear fuel is safely and securely being stored on site today.

Mr. BARTON. Thank you.

Thank you, Mr. Chairman.

Mr. SHIMKUS. Gentleman's time has expired.

The Chair now recognizes the gentlelady from California, Mrs. Capps, for 5 minutes.

Mrs. CAPPS. Thank you, Mr. Chairman, for holding this hearing, and I want to thank all of our Commissioners for your presence here today and your testimony.

Chairwoman Macfarlane, last December I asked you about the differing professional opinion—I think the parlance is DPO for shorthand—of Dr. Michael Peck regarding the seismic safety of Diablo Canyon Nuclear Power Plant, which, of course, is in my district. And as you know, Dr. Peck is the former senior resident inspector at Diablo Canyon, so I believe his views on this issue are significant. And as I understand it, the NRC has a process it follows to review and respond to a DPO when it is filed.

I wondered if you would please explain briefly this review procedure, and give us an update on where Dr. Peck's DPO stands in the review process today.

Ms. MACFARLANE. Certainly. Thank you, Congresswoman, for that.

We have a process by which if a staff member disagrees with a decision going forward, they can either submit a nonconcurrency or differing professional opinion, and they will be evaluated by the other staff and management. And if they still disagree, they can appeal a further time, and then the decision works its way up the management. I can tell you in the case of Michael Peck and his differing professional opinion, it is still with the differing professional opinion panel for a decision.

Mrs. CAPPS. OK. So do you know when this review will be completed and published?

Ms. MACFARLANE. I don't at this moment, but I can take that for the record and get back to you.

Mrs. CAPPS. Thank you. I would appreciate that very much, and I hope this review can be completed soon, as you understand.

[The information appears at the conclusion of the hearing.]

Mrs. CAPPS. I believe Dr. Peck in his report raised several important questions, and I know my constituents who live right adjacent to Diablo Canyon nuclear facility are eager to see the NRC's full response.

Another question for you, Chairwoman Macfarlane. In your testimony, you discuss the rationale behind the sharp increase in the fiscal year 2014 fee schedule. As you know, this sudden increase is concerning to many utilities, including PG&E, which operates Diablo Canyon. According to your testimony, one of the main reasons behind the sharp increase is sequestration and the resulting irregular appropriations process. Am I correct?

Ms. MACFARLANE. You are correct.

Mrs. CAPPS. Obviously NRC did not create the sequestration, but I see this as a prime example—and I just want to point that out to our committee members—a prime example of the lasting and significant impacts of this policy, which I believe to be misguided, because who would have predicted? I mean, the public wouldn't have guessed that it would have such long-lasting effects on your agency and your abilities to continue your work.

While a fee increase is understandable, it is obviously difficult for utilities, or really for any business, to plan their budgets when significant increases are now coming so late in the year, and I know you appreciate that, but you probably feel like you had no choice. This late and significant fee increase is going to force utilities to rework their budgets and take funding from other priorities, tough choices to make.

So looking forward now, Chairwoman, to fiscal year 2015, would a return to regular order in our appropriations process without the threat of sequestration—would this help to alleviate your current planning constraints?

Ms. MACFARLANE. Yes, that definitely would.

Mrs. CAPPS. Well, you know, I appreciate that for the record, because while we have temporarily removed the threat of sequestration with the Murray-Ryan budget, we clearly continue to feel the widespread and serious impacts of sequestration. I hope we can keep this in mind as we work through our appropriations process this summer.

Now, I have 50 seconds or less. I will just try this, if I can do it. As you know, the budget for 2015 eliminates funding for your successful Integrated University Program, IUP. As I understand it, this cut is part of the administration's broader efforts to reorganize STEM programs across Federal agencies. I want to know your take on this. Is this accurate, the rationale, and can you explain why the funding for IUP was eliminated?

Ms. MACFARLANE. It was eliminated as a result of a request from OMB, and so it is not included right now.

Mrs. CAPPS. Well, this program has been successful and very popular, and I am concerned about the impacts it will have on the program. I believe NRC's expertise has been key to the successful—if mean, if they are not experts, how can they really help to guide what the programs are doing? And I hope it continues to be funded somehow through the NRC. And I thank you for your time.

Mr. SHIMKUS. Gentlelady's time is expired.

The Chair now recognizes the gentleman from Nebraska. You are going to yield your time to Mr. Pitts. So the Chair now recognizes the gentleman Mr. Pitts for 5 minutes.

Mr. PITTS. Thanks to the Chair.

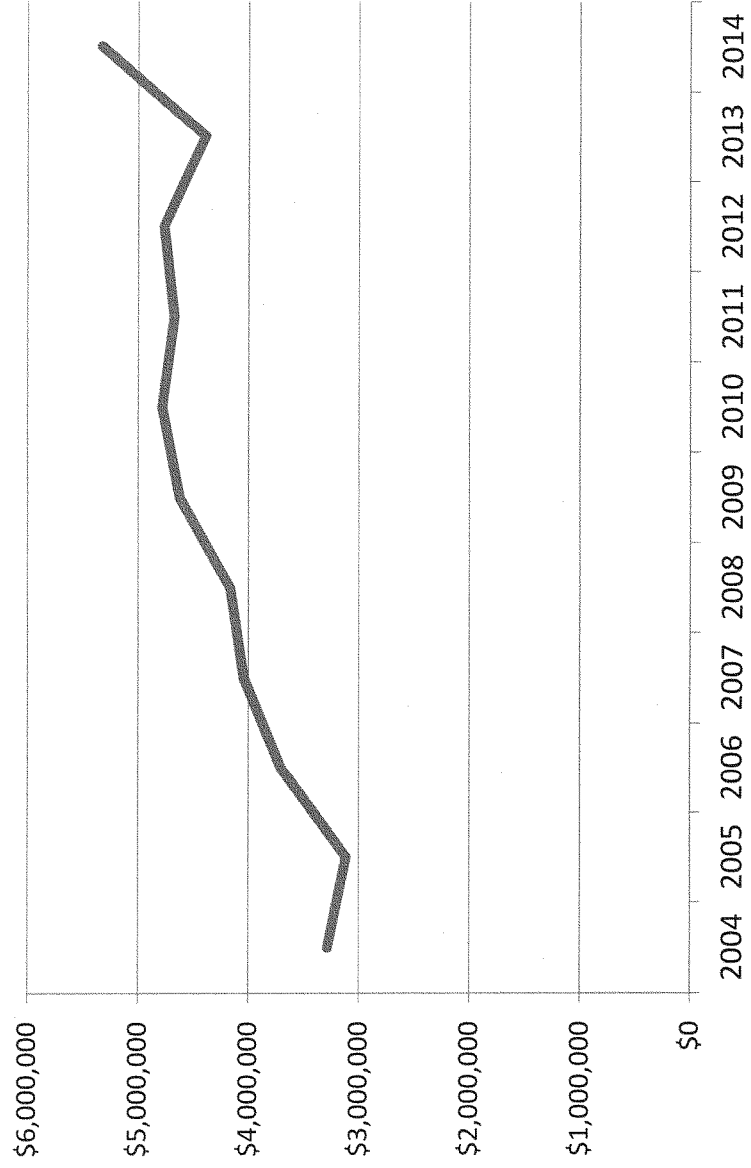
The Department of Energy is currently analyzing the impact of a scenario of one-third of our 100 reactors closing. Chairman Macfarlane, have you begun to examine the impact of a similar scenario on the NRC's resources?

Ms. MACFARLANE. We have not been looking that far out to the future. I think that is a 25-year look out to the future, and we have not gone that far out.

Mr. PITTS. In 2013, the NRC charged each operating reactor \$4.39 million in fees. In 2013, four reactors closed, which would suggest a shortfall in NRC's fee collection of over \$18 million. Yet the NRC is increasing fees on the remaining reactors by almost \$1 million each, totaling \$100 million, even though the NRC's industry trends assessment once again showed no adverse safety trends and several positive trends.

I would like to ask the clerk to put on the screens the graph "Increase in Operating Reactor Fees Billed Under 10 CFR Part 171."

**Increase in Operating Reactor Fees Billed Under
10 CFR Part 171 (per reactor)**



Now, you can see that even if you set aside 2013 because of the sequester, that still leaves a 12 percent increase in fees from the prior year in spite of four reactor closures. One industry executive was recently quoted as saying reactor closures are not a matter of whether or when, but how many.

For your fiscal year 2016 request, it is under preparations now, Chairwoman Macfarlane, what changes do you think should be made to the basis for next year's budget request to reflect this dynamic?

Ms. MACFARLANE. Of course, in our fiscal year 2016 budget, which we are developing now so I can't say much in detail about, we will be cognizant of these changes, and we will be cognizant to the best of our ability of any other changes that may occur in the industry over the next few years.

Mr. PITTS. I would like each of the Commissioners to give me your reaction to that question.

Ms. SVINICKI. I agree that we will take these external factors into account, but, again, under provisions of current law, we are required to collect 90 percent of our annual budget. So unless that provision of law is modified, we will end up using a similar formula to what we use now.

Mr. APOSTOLAKIS. I agree with my colleagues.

Mr. MAGWOOD. I agree with what the previous Commissioners have said. I would also add, though, that I particularly would be interested in looking at potential legislative approaches to make the fee a bit more modern. I think the fee has been in place for quite some time, and it might be worthwhile taking a good look at the structure.

Mr. OSTENDORFF. Congressman Pitts, I would agree with my colleagues and also add that consistent with Chairman Macfarlane's testimony submitted to this committee, that I believe we need to take a hard look at our 2019 sizing 5 years out and see where that has the agency headed given the changes in the nuclear industry.

Mr. PITTS. Thank you.

In 2004, the NRC expected the number of productive hours from the employees to be 1,776 per year. For fiscal year 2014, that number is 1,355, a decrease of 24 percent.

Chairman Macfarlane, can you explain this decrease?

Ms. MACFARLANE. I would have to look at those numbers to accurately address that, but what I can tell you is that the situation that we face now has changed. We have fewer new reactor licensing actions, but we have additional work in waste confidence, in Yucca Mountain, in decommissioning, in other areas that we had not expected.

Mr. PITTS. And finally as I understand it, post-Fukushima items have been categorized into three tiers, with Tier 1 items carrying the greatest safety benefits. Can you tell me the level of resources, both funding and staffing levels budgeted, for each tier for fiscal year 2015?

Ms. MACFARLANE. I will take that one for the record and get those numbers to you.

[The information appears at the conclusion of the hearing.]

Mr. PITTS. Thank you, Mr. Chairman. I yield back.

Mr. KINZINGER [presiding]. The gentleman yields back.

The Chair recognizes the gentleman from New York, Mr. Tonko, for 5 minutes.

Mr. TONKO. Thank you, Mr. Chairman.

I note that on page 4 of your testimony, Chair Macfarlane, that you list within the plan licensing activities for fiscal year 2015 15 ongoing reviews of compliance with the National Fire Protection Association standard for the 25 reactors that will transition to a risk- and performance-based set of standards.

Last year the Union of Concerned Scientists released a report critical of the NRC's enforcement of fire protection standards. The two sets of fire regulations were established quite some time ago, I believe in 1980 and 2004. The UCS report claimed that almost one-half of our Nation's operating reactors are not in compliance with these regulations. Your budget request suggests there are at least 25 reactors that are still in the process of adopting these standards. It is more than 30 years since the first set of standards was established and now 10 years since the 2004 revision.

So the question is, What is taking so long for these plans to come into compliance with fire safety standards?

Ms. MACFARLANE. Let me first say that all plants are in compliance with fire safety standards. We have offered all plants an opportunity to meet their fire safety requirements a different way, and that was the 2004 option, where we offered them to meet the National Fire Protection Association 805 regulations, which allowed the plants to do a performance assessment evaluation to meet fire safety regulations. So some plants have chosen to do that. That is a fairly long-term project that takes a few years to do that. So some plants are working that way. Other plants are remaining with the old Appendix R method.

Mr. TONKO. Thank you.

The Fukushima disaster illustrates for us just how spent fuel pools can quickly become unstable when a nuclear power plant loses the power needed to cool them.

In the U.S., many spent fuel pools are overcrowded. Currently the United States spent fuel pools overall contain five times more radioactive fuel than is in all the reactor cores, and some individual reactor pools contain more than eight times as much fuel in the reactor core. These spent fuel pools are not focused within containment structures or reinforced concrete like the reactor cores. So the question here, Chair, is, Is the water in spent fuel pools in need continuously to be cooled?

Ms. MACFARLANE. Is the water—yes, the water does need to be actively cooled.

Mr. TONKO. OK. And if the ability to cool the pools is lost, the spent fuel can overheat and catch fire, potentially releasing radiation into the environment. Is that a correct statement?

Ms. MACFARLANE. If there is a loss of coolant, loss of water in the pools, in some situations that is possible.

Mr. TONKO. And are densely packed pools more at risk of overheating in the event of a cooling system failure?

Ms. MACFARLANE. I think it may in part depend on the arrangement of the fuel in the pool.

Mr. TONKO. One option to enhance safety is to remove some of the spent fuel in these pools and place them in dry casks, which

are steel cylinders encased in concrete and stored outdoors on concrete pads.

Does reducing the amount of fuel in cooling pools reduce the potential consequences of an accident if the fuel does overheat?

Ms. MACFARLANE. So this is an area that we are actively considering right now. We have some staff reports on this topic, and the Commission is actively voting on this issue. So I don't want to say more until the votes are complete.

Mr. TONKO. OK. In 2005, the National Academy of Science has concluded that moving spent fuel from pools to dry casks reduces the likelihood of an accident since wider spacing between spent fuel handles—or bundles in a pool improves cooling. The casks themselves do not rely on electricity to cool the spent fuel?

That is why I was confused when I saw the NRC staff concluded in November that expediting the transfer of spent fuel pools to dry casks does not provide a substantial safety enhancement.

NRC staff stated that, and I quote, "spent fuel pools continue to provide adequate protection of public health and safety."

So Chairman Macfarlane, if reducing the amount of spent fuel in pools lessens the likelihood of an accident and reduces the consequences of an accident, doesn't it make sense for nuclear facilities to think about moving to dry cask storage sooner rather than later?

Ms. MACFARLANE. Again, this is an area that we are actively voting on, so out of respect to my colleagues, I will not make any comments.

Mr. TONKO. OK. Well, I just do hope that you and your colleagues will take a close look at this whole phenomenon.

Thank you very much. I yield back.

Mr. KINZINGER. Gentleman yields back.

Chair recognizes the gentleman from Nebraska, Mr. Terry, for 5 minutes.

Mr. TERRY. Thank you, Mr. Chairman, Acting Chairman.

Now, Chairman, appreciate—I am still caught up in some of the same issues that you and I have had some discussions about already, and I am still concerned about the emergency declaration and who has the power. And, of course, the Commissioner has that power to declare it, but I am still confused on where in the internal rules and regulations define what is an emergency so you—so a Commissioner knows what the criteria is to declare an emergency.

Ms. MACFARLANE. I appreciate your interest in this topic very much, and I—the appropriations last year required us to put the emergency delegation back in our—in our internal Commission procedures. We have done so. And I think it is very clear to all of us on the Commission, but I suggest you ask my colleagues if this clear to them.

Mr. TERRY. OK. Tell me, though, before I ask them if it is clear to them, what is the standard, then, for declaring an emergency pursuant to the internal Commission procedures? I am actually more concerned about the one who has to declare it—

Ms. MACFARLANE. Right.

Mr. TERRY (continuing). Which is you.

Ms. MACFARLANE. The Chairman or the Acting Chairman. So if I travel overseas, for instance, I will declare or request that one of my colleagues stand in for me, and were there to be an emergency,

it would be up to them. And we all train and practice scenarios so that we are prepared——

Mr. TERRY. What is the criteria?

Ms. MACFARLANE (continuing). To do this.

What is the criteria?

Mr. TERRY. For an emergency.

Ms. MACFARLANE. For an emergency? I will take that for the record and get you the exact wording.

[The information appears at the conclusion of the hearing.]

Mr. TERRY. I would appreciate that, because that is one of the basic reasons for the bill that our committee has drafted is there was really no definition of what an emergency is, and that allowed there to be abuse by your predecessor.

Ms. MACFARLANE. Yes. I think there has to be a little leeway with this, because if you try to specify too much, they—you say only in something that affects a plant within the United States. If there is an emergency in Canada, it might affect us, and we may have to activate.

Mr. TERRY. Sure. But also then the alternative of saying that White House says we don't want Yucca Mountain, and then the Chairman declares an emergency that truly isn't an emergency. So we also have to prevent against those type of abuses as well.

Ms. MACFARLANE. Certainly. I understand you wanting to do that.

Mr. TERRY. Now, let us talk a little about the internal Commission procedures. And there is a process in place when an emergency is called, and the executive team is activated, and you are the head then, you become the head of or the Commission—the chairperson becomes the head of the executive team, right?

Ms. MACFARLANE. That is correct.

Mr. TERRY. And then the internal procedures then also list then what the executive team—as whoever is leading it, the Acting Chair or the Chair. Those are spelled out in those internal procedures, correct?

Ms. MACFARLANE. Yes.

Mr. TERRY. Those series of things that have to be done by the executive team, those were in the internal procedures when Mr. Jaczko was Chairman, correct?

Ms. MACFARLANE. I don't know. The procedures did change in 2011, and I am not aware of what they looked like before and after.

Mr. TERRY. All right. So we will ask the few people that were there then.

Ms. Svinicki and Mr. Magwood.

Ms. SVINICKI. The Commission's internal procedures are not where one turns for the detailed procedural outline of how to conduct an emergency response. There are other agency documents that would guide that, management directives and emergency procedures. So I would need to look to those as the authoritative source, not the Commission's internal procedures.

Mr. TERRY. Well, I do have the executive team response procedure. Is that one of them that you are discussing?

Ms. SVINICKI. Yes, it would be.

Mr. TERRY. Mr. Magwood?

Mr. MAGWOOD. Yes, I agree with that. That is where the procedures would be. And those procedures were in place 3 years ago.

Mr. TERRY. They were in place.

Mr. MAGWOOD. Yes.

Mr. TERRY. I appreciate that.

And that kind of begs the question of why I push statutory correction, because they weren't followed 3 years ago just by whim, but yet they existed.

Also in regard to the executive team response procedure, it says, within those procedures, when the executive team is enacted, that the Chair, the Director, has to inform the Commissioners. Is that correct, Ms. Svinicki and Mr. Magwood?

Ms. SVINICKI. Yes. There are those notification requirements.

Mr. MAGWOOD. Yes.

Mr. TERRY. And, Chairman Macfarlane, that is one of the issues that was questioned in the bill, because it does say within 24 hours, you have to inform the Commissioners, but yet it is already written in the procedures, although they could be whimsically pushed aside, as we have learned in the past.

One last thing is in regard—I am just going ahead, Acting Chairman.

Mr. KINZINGER. Without objection.

Mr. TERRY. And also, and Mr. Tonko was kind enough to mock me on this, and you kind of participated in that, as my memory serves me, is also notifying press. But also within the ET response procedure, it actually says that you have to have a designee to issue a press release. That wasn't by magic; that wasn't put in the bill because we thought it was some whimsical issue that we thought would anger you. That is already part of the procedure. So I kind of just wanted to point that out to you.

Yield back.

Mr. KINZINGER. The gentleman yields back his remaining time. Always running over the young guy.

Chair recognizes the ranking member of the committee, the gentleman from California, Mr. Waxman, for 5 minutes.

Mr. WAXMAN. Thank you very much, Mr. Chairman.

Earlier in my opening comments, I discussed the tragic impacts of widespread uranium contamination in the Navajo Nation, and it has been devastating for the Navajo people and their lands. By the late 1980s, 500 radioactive mines were abandoned in the Navajo Nation. The Northeast Church Rock Mine near Gallup, New Mexico, was the second largest of these uranium mines, and it is the highest priority for cleanup because of the high radiation levels and the large number of families living nearby.

An agreement to clean up the site was reached with GE, which acquired United Nuclear Corporation, the mining company that once operated that mine. Under the agreement the mine waste will be placed in a new disposal cell to be built on top of the existing Church Rock uranium mill tailings disposal cell nearby. The design of the new disposal cell and placement of the mine waste will require NRC approval of a license amendment request by United Nuclear Corporation.

Chairman Macfarlane, the preparation of the license amendment application and NRC's review of that application are key steps in

finally getting the Northeast Church Rock Mine cleaned up. How can NRC help ensure that it receives a complete high-quality application that is ready for NRC review?

Ms. MACFARLANE. Well, we are meeting with the licensee. We are trying to be proactive and meet with them and make sure they understand our requirements and understand our needs, that we need a high-quality application. So we have been proactively working with them.

Mr. WAXMAN. As I understand, the NRC recently requested soil samples of the mine and mill sites to better understand the volume and characteristics of the material that will be moved and how well the existing cell at the mill site is functioning; is that right?

Ms. MACFARLANE. I think that is correct. This is a new, novel way of dealing with this, so we have to make sure we really understand the situation.

Mr. WAXMAN. When do you expect United Nuclear Corporation to submit a license amendment application?

Ms. MACFARLANE. According to the Environmental Protection Agency, they suggested 2016.

Mr. WAXMAN. As I understand it, this will be a unique application. It is the first time NRC will be reviewing a proposal to place one waste cell above another waste cell. Once the application is submitted, how long do you anticipate it will take for NRC to complete a safety evaluation report and environmental review?

Ms. MACFARLANE. It will probably take about 2 years to do the safety and environmental reviews.

Mr. WAXMAN. The safety and environmental reviews are obviously very important. NRC should be thorough and get it right; but, of course, the process should proceed expeditiously so the Navajo families can finally move back and live in their homes, or live in their homes even if they are not moving back, and work and play outdoors without sacrificing their health.

Chairman Macfarlane, will you commit to making this project a priority for the Commission and to ensuring that the necessary resources are available to complete the review as expeditiously as possible?

Ms. MACFARLANE. Yes. We are committed to doing a high-quality review in a timely manner.

Mr. WAXMAN. And let me ask your fellow Commissioners, do you agree that this project should be a priority for the Commission?

Ms. SVINICKI. I agree. Sir, if I may add that the NRC staff also informs the Commission that there are hearing rights attached to this process, and that if there is a hearing, although the staff can complete its safety and environmental reviews in 2 years, if the hearing process takes longer than that, sometimes applicants are hesitant to move forward until a hearing itself is concluded, and that may prolong the process. But on the shorter question of the priority, I agree.

Mr. APOSTOLAKIS. I agree it should be a priority.

Mr. WAXMAN. Mr. Magwood?

Mr. MAGWOOD. I agree. And I would also add, Congressman, that you may be aware there is a documentary known as "Navajo Boy" that talks about the tragedy associated with these mine wastes.

That documentary was screened at NRC for NRC staff. So we are very familiar with the issue.

Mr. WAXMAN. Good. I am pleased to hear that.

Mr. OSTENDORFF. Congressman, I agree with the comments of my colleagues.

Mr. WAXMAN. I appreciate your commitment. It will be several years before this site is finally cleaned up, but we should do everything we can to make that day a reality. American citizens live near this radioactive waste every day, and they deserve nothing less than our best efforts.

Thank you so much. Yield back the time.

Mr. KINZINGER. Gentleman yields back.

Chair now recognizes the gentleman from Ohio for 5 minutes, Mr. Latta.

Mr. LATTA. Thank you, Mr. Chairman. And thank you very much for the Commission members to be with us today.

Commissioner Ostendorff, if I can start with you. Under the law, NRC is required to recover 90 percent of its budget from fees paid by licensees, and they bill operating reactors in two ways. The first is under 10 CFR Part 170, and it is for the licensee-specific work, such as a new plant review or license extension. The second, under 10 CFR Part 171, is an annual fee billed to all operating reactors.

This means that the NRC's workload and, hence, fee collection under Part 170 falls short, then the NRC has to make it up by raising the Part 170 fees paid by all reactors; is this correct?

Mr. OSTENDORFF. I am not looking—Congressman, I appreciate the question. I am not looking at the parts in front of me, but that sounds to me to be correct.

Mr. LATTA. OK. Thank you.

And for this year, Part 171 fees billed to each reactor have increased almost \$1 million per reactor. Given we have 100 operating reactors, that is nearly \$100 million. Chairman Macfarlane, would you explain to the committee why there is such an increase?

Ms. MACFARLANE. Sure. I would be happy to. And I am going to use a graphic because I think that will help explain it.

So this is a little pie chart, and it shows you in blue, because that is probably all you can make out in this circle, 65 percent of the fee increase comes because—as a result of sequestration. In fiscal year 2013, we were sequestered, and the fee was reduced because of that, because the budget was reduced. And so the annual fee in fiscal year 2013 was significantly lower because of that.

Sequestration did carry over into some of fiscal year 2014. We did not get our appropriation until halfway through fiscal year 2014. So that is in part why the licensees are being hit with such a big number in their last quarter. If we had gotten the full budget, full 2014 budget, at the beginning of the fiscal year, things would have been a little bit better. That was 65 percent of the fee increase.

Twenty percent of the fee increase comes from a correction that we had to do. We overbilled in prior years for services. In fiscal year 2013, the fee was reduced because of that, in part. And so, again, it was anomalously low, the fee was anomalously low in fiscal year 2013.

Mr. LATTA. Pardon me, if I could, let me reclaim my time. I want to read something to you. This is from the NRC's proposed rule on fee recovery, explains the reason for the large increase this way: The annual fees for power reactors increased primarily as a result of the decreased 10 CFR Part 170 billings that decline in current-year licensing reactions, delays in major design certification applications and combined operating licensing, and shutdown of two operating reactors.

So I guess in looking at this, then, so NRC's own document doesn't say anything about the sequester. It says NRC's declining workload and productivity are primarily to blame for the increased Part 171 fees, reinforcing points that several of our Members made in our December 12th hearing that we had last year regarding NRC's declining workload and licensing actions and the new reactor licensing.

The NRC document also makes clear that the two reactors shutting down and remaining reactors all have to pay more to make up that difference. So with these rosy assumptions out there about the level Part 170 work, that work doesn't materialize, and then the operating reactors paying the price—pay the price via increased 171 fees.

And so for 2 years in a row, the NRC has accounted for the shutdown of the reactors and the resulting loss of those fees by simply billing the remaining reactors more to make up that difference.

And so, Chairman, do you believe it is acceptable for NRC to increase the fees billed to reactor operators by \$100 million in a single year?

Ms. MACFARLANE. Congressman, thank you.

We are required to collect fees in the year appropriated, 90 percent of the fees in the year appropriated. So that is a requirement by law. We have very little flexibility with this situation. We regret the situation as well.

Mr. LATTA. If I could reclaim my time, because I am running out here.

Do you anticipate the Part 171 fees increasing again next year?

Ms. MACFARLANE. The Part 171 fees. I don't at the moment, but we will see what happens with the larger environment in which we work.

Mr. LATTA. Thank you very much, Mr. Chairman. My time has expired.

Mr. KINZINGER. Gentleman yields back.

Chair recognizes the gentleman from New York, Mr. Engel, for 5 minutes.

Mr. ENGEL. Thank you, Mr. Chairman. I would like to welcome Chairman Macfarlane and the Commissioners back to the committee, and thank you for your testimony.

Let me start with you, Chair Macfarlane. We have discussed Indian Point in the past. It is just about 10 miles or so from my district. I have been long in favor of closing it because of a number of difficulties that we have had with it. So I want to again revisit one of what I consider the most serious safety issues facing the New York metropolitan region and to urge continued vigilance from the NRC.

I note that the safety budget request for operating reactors is 577.3 million, which is an overall funding decrease of 12.8 million compared to the fiscal year 2014 enacted budget. I know that the number of operating reactors has decreased by four; another has announced its closer later on in the year. But I remain concerned at a time when there is pressure on the Federal budget at times at the expense of vital programs, I want to make sure the NRC maintains adequate funding to ensure the public safety of all of our nuclear facilities.

So let me ask you, under your current budget constraints, do you believe that the NRC maintains the operational ability to meet all of the safety requirements it is responsible for, even with the proposed decrease?

Ms. MACFARLANE. Yes, absolutely, I do. And let me assure you that we take our mission to assure public health and safety very, very seriously. We would not—we make sure that we budget appropriately to maintain that mission.

Mr. ENGEL. Would any of the Commissioners disagree with that?

OK. Thank you.

The last time the Commissioners were before our subcommittee, before our subcommittee, we discussed a bill, which was H.R. 3132, which would have dramatically altered the NRC's ability to respond to nuclear disaster. As the NRC continues to review the disaster at Fukushima and budget for that analysis, do you, Madam Chair, believe that the NRC has adequate resources to fully complete the review and implement necessary changes?

Ms. MACFARLANE. We have adequate resources. We are a bit squashed in our skill sets. So, in particular, to do the Fukushima reviews, we need a number of seismologists, hydrologists, -ologists, and those are in somewhat short supply. They are required for Fukushima, they are required for waste confidence, they are required for Yucca Mountain, and they are required for new reactor reviews. So those folks are in somewhat short supply.

At the same time, because the Fukushima work is time limited, we don't want to go out and hire a bunch of people who won't have work to do 7 years down the road. So we are trying to manage our resources very carefully.

Mr. ENGEL. Thank you.

Anybody else care to comment on that?

OK. I guess, Madam Chair, everyone agrees with you, so that is good news.

I want to go back to some of the things Mr. Tonko mentioned about dry cask storage of spent fuel rods. I know that you say you are discussing it, so some of the things you prefer not to comment on.

But risks from spent fuel in storage pools obviously can be reduced by moving some of it to dry casks. And again, the budget fiscal year 2015, the requests for spent fuel storage and transportation has overall decreased, again, by 2.3 million compared to the fiscal year 2014 budget.

So could you tell me, under the fiscal year 2015 budget request, how are you prioritizing the dry cask storage of spent fuel rods as well as any other hurdles that remain for the implementation of this safer storage system?

Ms. MACFARLANE. I believe we have adequate resources to evaluate any new dry cask storage proposals that we receive.

Mr. ENGEL. Thank you.

Anybody else?

See, everyone agrees with you. What a great Chair.

Thank you, Mr. Chairman. I yield back.

Mr. KINZINGER. Gentleman yields back.

Chair recognizes himself now for 5 minutes. And again, thank you all for being out here, thanks for your service to your country, and thank you for spending the time with us today.

So the 16th Congressional District that I represent in Illinois has four nuclear power plants. We also have the site in Morris, Illinois, where there was originally the idea of nuclear reprocessing and recycling, and, of course, a lot of spent fuel storage and everything there as well.

So this is a very, very important concern to me. And I would like to also make a plug for, you know, look, this is important that we open Yucca Mountain, follow the law, and move ahead on that.

But I have a couple of points—of questions I want to make. According to the NRC's proposed rule on fee recovery, corporate support, a.k.a. overhead, makes up nearly half of your Commission's total budget. That means that for almost every dollar being spent on substantive work, there is a dollar being spent supporting the people doing the work, at a total cost of \$486 million annually.

In fact, after looking at past fee recovery rules, it seems as though corporate support costs, with one exception, have increased every single year for the past decade.

In your written testimony, you state that the steps to reduce overhead have been taken, but the growing corporate support burden indicates that those actions so far have been ineffective. I believe this to be especially concerning given the reduced workload on the NRC with the decrease in the number of operating reactors and overall applications over the past few years.

Chairman Macfarlane, what are your plans to bring this under control? And are you planning any new actions that you haven't already taken over the past few years in the future?

Ms. MACFARLANE. Thank you for your question, Congressman.

Corporate support, I believe, in 2015 would be 362 million out of the 1.06 billion, or 34 percent of the budget. And I will let you know that we have already been taking action to reduce that aspect of our budget. Since 2010, we have reduced significantly, 192 FTE and about \$30 million, by centralizing administrative functions, and we are going to continue to do that. But we are also going to take a larger look at where we are going to be and where the industry is going to be in 2019, 2020 and see how we can appropriately resize and restructure the agency to address that future.

Mr. KINZINGER. So is this a—I mean, do you have future steps in mind that you have not implemented yet as a—

Ms. MACFARLANE. Yes, we are in the process of developing that. Stay tuned.

Mr. KINZINGER. Do any of the other Commissioners have any comments on that at all?

Mr. MAGWOOD. I would just make one comment. I think the agency has had to deal with the fact that, I think as the Chairman has mentioned, that the future hasn't turned out to be what we thought it was going to be several years ago. So we have structured ourselves and prepared ourselves for a much more vigorous level of licensing activity than has actually developed, but the infrastructure still is in place because we wanted to be ready. Now that that future has changed, we have to adjust again and turn the aircraft carrier around, and it takes some time. We are working on it, and it is something we take very seriously.

Mr. KINZINGER. Thank you. And there is a footnote that appears several times in the budget request. Says, the metric for number of license actions is challenged due to Fukushima-related work competing for the same critical area skill set branches and NRR, Office of Nuclear Reactor Regulation.

Chairman Macfarlane, how many NRC licensing actions and reviews have been delayed because of Fukushima-related work?

Ms. MACFARLANE. I don't have an exact number. I can take that for the record and get you an exact number if you would like.

Mr. KINZINGER. Yes. That would be great.

[The information appears at the conclusion of the hearing.]

Mr. KINZINGER. And, you know, I understand that because of what happened, it is important, but I definitely urge you all to return to a normal order of business for the sake of everyone, including my constituents who are being impacted by the continual diversion of resources to that task force.

And the last question for the Chairman: Wouldn't an effort to reduce corporate support costs free up resources to spend on regulatory reviews that the industry needs to operate economically?

Ms. MACFARLANE. Yes. And as I said, we are—we are looking at that issue, and we are in the process already reducing corporate support.

Mr. KINZINGER. OK. Again, thank you all for your testimony.

I will yield back and recognize the gentleman from California, Mr. McNerney, for 5 minutes.

Mr. MCNERNEY. Thank you, Mr. Chairman. And good morning. Thank you for coming to testify this morning.

I just have sort of a general question, Chairwoman. You know, we are all worried about climate change and so on. Do you see the future of nuclear power having the capacity to step in and help generate sufficient power and energy to reduce our consumption of fossil fuels in the next 10 years?

Ms. MACFARLANE. As I said earlier this morning, we at the NRC are a safety regulator, so we are not in the business of prognosticating and developing energy policy for the Nation. Nonetheless, I will note that nuclear energy produces base load power that is largely carbon free.

Mr. MCNERNEY. So do you see enough permits being issued in the next 10 years to double production?

Ms. MACFARLANE. I can just give you some facts. The facts are that we have five reactors in the process of construction and coming online. And we have had five reactors either announce or actually shut down in the past 2 years.

Mr. MCNERNEY. And it takes a good 10 years between the time a reactor is initially funded and designed and created and——

Ms. MACFARLANE. It takes a number of years. I don't know if 10 is the exact number, but it takes a number of years, yes.

Mr. MCNERNEY. Well, I am going to talk a little bit about the lessons of Fukushima. I think in 2011, the NRC created a task force to analyze the lessons of that disaster, and the task force found that the level of protection against natural phenomena differs from one plant to the next in the United States depending on when it was built and licensed.

Accordingly, the Commission ordered all U.S. nuclear reactors to reevaluate the vulnerability to earthquakes. The plant operators in the central eastern United States had to submit seismic hazard screening reports by the end of March. What is the status of these reports?

Ms. MACFARLANE. We did receive them, and we have reviewed them. And in the next few days we will be issuing a letter to the licensees on our prioritization and schedule for those that have to do more analysis.

Mr. MCNERNEY. Thank you.

If a nuclear reactor finds that it is unprepared for a seismic hazard, what action does it have to take in the short term to address this concern?

Ms. MACFARLANE. It has to immediately be capable of dealing with a seismic hazard. We won't let plants operate that aren't capable of dealing with situations that they need to.

Mr. MCNERNEY. So you will potentially shut down plants?

Ms. MACFARLANE. If we need to, until they are ready, have done what we require to be prepared.

Mr. MCNERNEY. Now, each of the plant operators will also undertake a longer-term seismic risk evaluation; is that right?

Ms. MACFARLANE. Only if we decide that they need to, if their, in technical terms, ground-to-motion response spectrum exceeds their design basis.

Mr. MCNERNEY. So how long do you think these really evaluations will take?

Ms. MACFARLANE. If they have to do the detailed evaluation, those evaluations take a number of years. I believe for those plants that we will deem the highest priority, it will take probably 3 years.

Mr. MCNERNEY. So we could conceivably see plants shut down for as long as it takes.

Ms. MACFARLANE. The plants have been evaluating themselves, and we have evaluated them in terms of safety. So if there are plants that do have their—these ground motion response spectrum exceeding the design basis, we will require interim actions.

Mr. MCNERNEY. OK. I am going to yield back.

Mr. KINZINGER. Good man. Gentleman yields back.

Chair now recognizes the gentleman from Texas, Mr. Hall, for 5 minutes.

Mr. HALL. Thank you, Mr. Chairman. And I thank the Commissioners for being here.

And looking at the NRC's proposal rule on fee recovery for fiscal year 2014, there have been a lot of numbers here on total cost, a

million here and a million there, then and now. Let me ask you this: The number of licensing employees is now 2,254; is that correct?

Ms. MACFARLANE. The number of employees at the Nuclear Regulatory Commission?

Mr. HALL. Licensing employees, yes.

Ms. MACFARLANE. Licensing employees. I will have to check that number for you.

Mr. HALL. Does it sound reasonable to you?

Ms. MACFARLANE. It could be.

Mr. HALL. Anything could be. Does it sound reasonable to you? We have these from the task force and from public numbers.

Ms. MACFARLANE. I will check that number for you.

Mr. HALL. All right. That won't help me today, but I appreciate it.

[The information appears at the conclusion of the hearing.]

Mr. HALL. The number of licensing employees is now, what you don't know for sure, 2,254, according to our search. And it was 1,297 10 years ago. And the number of hours these licensing employees are expected to be productive is 1,355 hours each day. Do you know that figure?

Ms. MACFARLANE. No, I don't.

Mr. HALL. Ten years ago, they were expected to be productive, according to your own records, for 1,776 hours.

The hourly rate that the NRC charge for licensing work is now 279 bucks an hour; is that right?

Ms. MACFARLANE. It is in that area.

Mr. HALL. Do you not know that figure?

Ms. MACFARLANE. Yes. You are correct.

Mr. HALL. OK. Ten years ago it was only \$156. Did you know that?

Ms. MACFARLANE. No, I did not.

Mr. HALL. If I have this straight, there are a lot more folks being paid a lot more money to work a lot fewer hours. I don't know how you can deduct anything other than that.

NRC is spending 486 million on corporate support this year. Chairman Macfarlane, given all the support these licensing employees are getting, shouldn't they be able to work as many productive hours as they used to work 10 years ago?

Ms. MACFARLANE. I believe we are spending 362 million on corporate support. But anyway.

Mr. HALL. Our figures show you spent 486 million on corporate support this year. Is that incorrect?

Ms. MACFARLANE. I believe it is 362 million. In the congressional budget justification, page 151 of the congressional—

Mr. HALL. That may make it worse, then. We say that the NRC is spending 486 million on corporate support this year. Now, Chairman Macfarlane, given all the support these licensing employees are getting, look like they ought to be as productive as they were 10 years ago. Do you have any answer for that? Assuming that these figures are correct.

Ms. MACFARLANE. Sorry, can you repeat the question?

Mr. HALL. Do you have any—assuming that these figures are correct, and we said that the NRC is spending 486 million on cor-

porate support, and if we have it straight, there are a lot more folks being paid a lot more money to work a lot fewer hours today. Is that correct? Is there any reason for that?

Ms. MACFARLANE. As I said in my previous statement, we are reducing corporate support by combining administrative and centralizing administrative functions across the offices at the agency. So those numbers will be going down. We are actively doing that.

Mr. HALL. Well, you think that they will be able to work as many productive hours as they did 10 years ago?

Ms. MACFARLANE. Absolutely.

Mr. HALL. Anybody else like to answer that, if she doesn't have an answer for it?

Ms. MACFARLANE. Of course, our staff is very busy, and they are working as many productive hours as they have in the past. They are not working less.

Mr. HALL. Well, you are on record, you are talking for the record, and I am asking questions for the record, and these questions and your answers will be on the record. Will you please check those? It seems that that would free up enough resources, if our figures are correct, to review licensing actions in a timely fashion and eliminate the NRC's need for a budget increase.

Ms. MACFARLANE. We have many responsibilities at the NRC besides licensing actions, and we are working very hard to be as timely as possible.

Mr. HALL. But I am only asking you about licensing. And the record is there, and I would ask you to review that record and give us some answer. Would you like for me to send you questions for further questions?

Ms. MACFARLANE. Sure.

[The information appears at the conclusion of the hearing.]

Mr. HALL. I think my time is up, Mr. Chairman.

Mr. KINZINGER. Gentleman yields back.

Chair recognizes the gentleman from Ohio, Mr. Johnson, for 5 minutes.

Mr. JOHNSON. Thank you, Mr. Chairman. Thank the panel for being here with us today.

As my friend Mr. Shimkus noted, you failed to request any funding to proceed with the Yucca Mountain license review. And our questions for the record from the December 12th hearing, you were asked to provide, and I quote, "detailed schedule and resource estimates to render a final decision on the issuance of a construction authorization for Yucca Mountain," but you failed to do that as well.

So, Commissioner Magwood, how is Congress supposed to know how much to appropriate if the NRC refuses to estimate the costs of carrying out its statutory mandate?

Mr. MAGWOOD. Congressman, if I knew how much it would cost, I would tell you.

Mr. JOHNSON. On the 12th, you took that as a task, the Commission took that as a task, and we haven't seen anything.

Ms. MACFARLANE. Yes. And I—yes. We are in the process of developing that estimate, Congressman.

Mr. JOHNSON. When will we see it?

Ms. MACFARLANE. As soon as we can. We are working very hard on that.

Mr. JOHNSON. Has OMB in any way instructed you either directly or indirectly to withhold such information?

Ms. MACFARLANE. I do not believe so.

Mr. JOHNSON. No. OK.

So the NRC failed to request funding for the spent fuel disposal enshrined in law, but I notice your budget includes language for modeling, and I quote, "future alternate strategies for disposal of spent nuclear fuel," and for supporting, and I quote, "changes in the national high-level waste and spent nuclear fuel management strategy."

This appears to be a reference to the DOE's Strategy for the Management and Disposal of Used Nuclear Fuel and High-Level Radioactive Waste.

So, Chairman Macfarlane, are you aware that DOE strategy has not been authorized by Congress, and the DC Circuit Court stated the strategy is, I quote, "based on assumptions directly contrary to the law"?

Ms. MACFARLANE. I was not aware.

Mr. JOHNSON. You are not aware. OK. Well, you are now.

The NRC staff provided a briefing for the committee staff on the fiscal year 2015 budget. Our staff raised questions about the alternate disposal strategy language. And a response from NRC's Congressional staffers—Congressional Affairs Office was, and I quote, "the activities described in this bullet represent a nominal change in resources essential to maintain and enhance NRC capabilities to analyze risk and assess performances of geologic disposal of high-level waste and spent nuclear fuel in a variety of geologic settings. This effort is not related to any action before the Commission. Policy issues are the purview of the Commission, and this is a significant policy issue on which the Commission would have to direct the staff on how to proceed."

So, Ms. Svinicki—did I pronounce your name right? I apologize. Do you support directing the staff to work on alternate disposal strategies? That is a yes or no. Do you support directing the staff?

Ms. SVINICKI. I support their maintaining cognizance of the policy development for the Nation, yes.

Mr. JOHNSON. But do you support directing the staff to work on alternate disposal strategies?

Mr. SVINICKI. If "working" is maintaining a level of cognizance of the scientific debate, then, yes.

Mr. JOHNSON. Mr. Magwood, do you support directing the staff to work on alternate disposal strategies?

Mr. MAGWOOD. I would have said just no, but I actually agree with Commissioner Svinicki's comment. But beyond that, no.

Mr. OSTENDORFF. Congressman Johnson, I agree with Commissioner Svinicki, but I also must add for clarification, because I don't know that it has been clearly presented, is that we, the Commission, have or are working to provide this committee with an estimate for how long it would take and what budgetary resources to move forward with the Yucca Mountain—

Mr. JOHNSON. And I understand that. I understand that is what you are saying, but I also understand that what the law requires,

you have got money in the budget for other things, but you don't have money in the budget for what the law requires.

So you failed to request funding for statutory mandate to review the Yucca Mountain license application to provide Congress with a cost estimate. Instead you are requesting funds to support a strategy that has not been authorized and is based on assumptions directly contrary to the law.

So, Chairman Macfarlane, will Yucca Mountain funds be used to support this effort?

Ms. MACFARLANE. The Nuclear Waste Fund will be used for the——

Mr. JOHNSON. To do what is in violation or contrary to the law?

Ms. MACFARLANE. It is licensed for. It is required for. I will not support anything else.

Mr. JOHNSON. Mr. Chairman, I have exceeded my time.

Mr. KINZINGER. Gentleman yields back.

We figured out the problem between Mr. Hall's numbers and your number. Your number that you are talking about is the budgeted number. What we have here—and we are happy to provide to you all if you need to see it—is the actual expenditures in terms of corporate support. And we have seen that increase——

Ms. MACFARLANE. For 2014.

Mr. KINZINGER. Right. For 2014 and 2013 and 2012. And it has been—we are happy to provide that if you need to.

With that, if there are no other Members seeking recognition, I would like to thank all the witnesses and Members that have participated in today's hearing. Remind Members that they have 10 business days to submit questions for the record. And I ask that the witnesses all agree to respond promptly to the questions.

The subcommittee is adjourned.

[Whereupon, at 11:48 a.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

RED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

ONE HUNDRED THIRTEENTH CONGRESS
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May 29, 2014

The Honorable Allison M. Macfarlane
Chairman
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Dear Chairman Macfarlane:

Thank you for appearing before the Subcommittee on Energy and Power on Wednesday, May 7, 2014, to testify at the hearing entitled "The NRC FY 2015 Budget and Policy Issues."

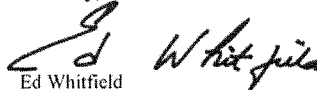
Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

Also attached are Member requests made during the hearing. The format of your responses to these requests should follow the same format as your responses to the additional questions for the record.

To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Thursday, June 12, 2014. Your responses should be mailed to Nick Abraham, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed to Nick.Abraham@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Ed Whitfield
Chairman
Subcommittee on Energy and Power

cc: The Honorable Bobby L. Rush, Ranking Member,
Subcommittee on Energy and Power

Attachments

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Ralph Hall

QUESTION 1. A review of fee recovery rules for the last decade shows that corporate support has increased every year, with only one exception. The fee recovery rule for FY 2014 indicates the NRC spent \$486 million in corporate support. In the hearing, Chairman Macfarlane testified that the NRC estimates spending for FY 2015 is only \$362 million and cited page 151 of the NRC budget. Please describe how the NRC will achieve a reduction of \$124 million in one year when previous efforts have had no apparent impact.

Answer.

Corporate support components are represented differently in the FY 2015 Congressional Budget Justification (CBJ) and the FY 2014 Fee Rule (Fee Rule). Page 151 of the CBJ, which Chairman Macfarlane referenced, shows an FY 2014 corporate support budget of \$384 million, whereas the Fee Rule provides for an amount of \$486 million. In accordance with OMB circular A-25 (User Charges), the Fee Rule considers managers, administrative assistants, and other support personnel as well as the budget of the Office of the Inspector General to be "corporate support" components for the purpose of calculating the overall hourly Fees for Services rate under 10 CFR Part 170. The CBJ, on the other hand, allocates managers, administrative assistants, and other support personnel to the direct program areas for which they commit the majority of their time (e.g. Operating Reactors or Fuel Facilities).

Another difference between the Fee Rule and the CBJ is that the Integrated University Program grants budget (\$15 million) is considered a direct program cost under the Fee Rule, but corporate support under the CBJ. This distinction is made because grant funds are considered part of the 10 percent fee relief, and all fee relief is treated as direct work within the Fee Rule.

As I testified during the hearing, we are reducing corporate support by combining and centralizing administrative functions across the agency, and we are looking at where the agency and the industry will be in 5-6 years from now so that we can appropriately resize and restructure the agency to address the future. The FY 2015 request for corporate support is \$362 million, which represents a decrease of \$22 million when compared to FY 2014.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Ralph Hall

QUESTION 2. The fee recovery rule for FY 2014 indicates 2,254 Mission Direct FTEs. This rule also indicates 1,375 direct hours worked per FTE during the year. According to the FY 2004 fee recovery rule, mission direct FTEs worked 1,776 direct hours. If NRC's current workforce returned to the level of direct hours worked to the levels achieved in 2004, the increase in the NRC's productivity would effectively equal the addition of roughly 509 FTEs.

2a. Please explain this erosion of productivity.

Answer.

The FY 2004 Fee Rule used an estimate of 1,776 hours per direct FTE to calculate the program hourly rates, pursuant to the Office of Management and Budget (OMB) circular A-76, "Performance of Commercial Activities." In the 2005 Fee Rule, the NRC revised the estimate of direct hours per FTE to more accurately reflect the NRC's costs of providing Part 170 services. The NRC determined that indirect costs such as administrative activities that a direct FTE may perform are more accurately considered overhead. Yet these hours were included in the 1,776 hours, thus overestimating the total.

Beginning in the FY 2005 Fee Rule, the NRC based the calculation of hourly rates on guidance from OMB circular A-25, "User Charges" which emphasizes that agency fees should reflect the full cost of providing services to identifiable beneficiaries. The NRC believes that by using an estimate of direct hours per direct FTE which reflects only direct staff time, we can achieve more accurate full costing. This revision from FY 2005 lowered the estimate of direct hours per direct FTE to 1,446, a decrease of 330 hours. The current FY 2014 estimate of 1,375 hours per direct FTE has decreased by 71 hours since FY 2005, due to fluctuations in indirect activities, annual leave projections, and new employees.

Although the method used to calculate hourly rates changed, the NRC's workload has not been static. While there are fewer operating reactors and fewer applications for new reactors than anticipated, the NRC's workload has increased in other areas. We are reviewing the operating license for Watts Bar Unit 2, transitioning to operational oversight for the new Vogtle and Summer reactors, preparing for small modular reactor design reviews, implementing the Fukushima lessons-learned and mitigating strategies, regulating the safe decommissioning of shut-down reactors, and addressing the court's remands regarding Waste Confidence and the licensing process for Yucca Mountain.

2b. Please describe the steps NRC is taking to restore its productivity to previous levels.

Answer.

Please see the answer to Question 2a above.

2c. Please explain why the NRC's FY 2015 Congressional Budget Justification requests the addition of 66 FTEs rather than pursuing productivity improvement.

Answer.

The NRC's budget in FY 2015 includes 3,819 FTEs (not including the Office of the Inspector General), which is essentially flat from FY 2014. The increase of 66 FTE in FY 2015 is attributable to a reallocation in FTEs that occurred in FY 2014 to accommodate other required programs and priorities such as the Integrated University Program, which was mandated through the FY 2014 appropriation. This reduction has not been reflected in FY 2015. As I testified during the hearing, we are reducing corporate support by combining and centralizing administrative functions across the agency, and we are looking at where the agency and the industry will be in 5-6 years from now so that we can appropriately resize and restructure the agency to address the future. The FY 2015 request for corporate support is \$362 million, which represents a decrease of \$22 million when compared to FY 2014.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Ralph Hall

QUESTION 3. In addressing the Nuclear Energy Assembly on May 21, 2014, Chairman Macfarlane stated:

"Of the 18 combined license applications we anticipated, licenses have been issued for two reactor sites and an additional eight are under active review, but six application reviews have now been suspended at your request and two applications have been withdrawn. In response, the NRC has had to define a path to redeploy underused resources to other priorities or transition to a smaller technical team. A similar story can be told with regard to small modular reactors. To borrow a metaphor, running a government agency is akin to driving an aircraft carrier, not a cigar boat. I can't turn this ship on a dime."

A review of previous fee recovery rules indicates a decline in 10 CFR Part 170 fees for each of the last three years. Please describe what actions the NRC is taking to better project the workload billable under Part 170 and how long it will take to bring NRC projections in line with actual fee recovery.

Answer.

The NRC estimates the amount of 10 CFR Part 170 fees based on established fee methodology guidelines (42 FR 22149; May 2, 1977), which specify that the NRC has the authority to recover the full cost of providing services to identifiable beneficiaries. The NRC uses these established guidelines to apply the most current financial data and workload projections to calculate the 10 CFR Part 170 fee estimates.

Current financial data includes: 1) four quarters of the most recent billing data (hourly rate invoice data); 2) actual contractual work charged (prior period data) to develop contract work estimates; and 3) the number of FTE hours charged, multiplied by the NRC professional hourly rate.

The NRC is aware of the decreasing 10 CFR Part 170 fees charged for service over the last few years. Rather than being the product of less-accurate cost projections, the decline is due primarily to funds expended on generic activities for which we do not charge Part 170 fees associated with lessons learned from NRC's Fukushima Near-Term Task Force (NTTF). Some lessons-learned were immediately implemented at sites through orders and requests for information; others have required further policy development and technical study.

As the NRC completes generic regulatory actions (such as rulemakings) in response to lessons we have learned from the Fukushima accident, the costs related to those actions will decline. Similarly, as the affected licensees and certificate holders begin to implement required regulatory actions, follow-on activities will likely result in site-specific action on the part of the NRC. This will likely cause an increase in Part 170 fees because the NRC will be shifting from generic, non-site-specific work to fee for service work. Many generic regulatory actions subsequent to the Fukushima NTTF report are still in progress and current cost distributions continue to reflect that workload.

The NRC's budget and estimates of 10 CFR Part 170 fees is driven by licensees and applicants projections and schedules for submitting license applications. In the case of power reactor applications, a number of application submittals have been delayed, which has resulted in a slow-down or suspension of the NRC's review and a corresponding decline in 10 CFR Part 170 fees. The NRC has actively responded by reducing staff and contract resource expenditures and by reorganizing staff assignments. The NRC is also undertaking a review that is intended to help the NRC more effectively accomplish its mission by, among other things, enhancing NRC's agility and flexibility to accommodate changing workload.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Ralph Hall

QUESTION 4. There are 68 or more research projects listed in the FY 2015 budget request. Please provide a listing of all research projects under the Reactor Safety Budget including a short description of the project, its ranking in terms of quantitative Risk reduction, and specific funding amount requested for each project.

ANSWER.

In creating the agency's FY 2015 budget, reactor safety program research projects are aggregated into "product" areas, rather than budgeted at the individual project level. Most of the reactor safety research projects listed in the FY 2015 budget request are aggregated in the budget categories listed below. The agency does not calculate risk reduction related to these projects and, therefore, cannot rank its projects in such terms. The agency's research projects are typically prioritized under a high/medium/low scheme, and the offices work together on a periodic basis to reprioritize the work based on emergent needs, resource limitations, and other changes.

Products	FY 2015	
	President's Budget	
	\$ K	FTE
Fukushima Near-Term Task Force	1,651	6.9
Generic Issues Program	225	7.7
International Research	2,946	5.9
Reactors Research	36,689	128.6
Advanced Reactors Research	910	6.7
New Reactors Research	3,371	14.0

A short description of each product is as follows:

Fukushima Near-Term Task Force

Research will be performed to address recommendations from the lessons-learned evaluation of the Fukushima accident. This will include probabilistic risk assessment of seismically induced flooding and fire, analysis of filtered venting, hydrogen control and mitigation, and enhanced reactor and containment instrumentation. This research also supports activities associated with individual rulemakings related to the NRC's Near Term Task Force report recommendations on the Fukushima event (subsequently categorized into Tiers 1, 2, and 3) in the regulatory basis, proposed rule, and final rule phases. It also includes, as applicable, other rulemaking process phases (e.g. advanced notice of proposed rulemaking, rulemaking plan, etc.); and rulemaking support activities tied to the Near Term Task Force report recommendations (e.g., evaluating and documenting an agency decision on a petition for rulemaking, regulatory analysis guidance updates). Specific activities include rulemaking and associated guidance documentation and

coordination; project management, technical, legal, and administrative support for rulemaking working groups; and hosting public meetings.

Generic Issues Program

This product area includes activities for the identification and resolution of generic safety and security issues, which is mandated by Congress in Section 210 of the Energy Reorganization Act (1974). The program addresses issues that have potentially significant generic implications related to safety or security which cannot be more effectively resolved by other regulatory programs or processes.

International Research

This product area supports the agency's nuclear safety mission through the joint use of research facilities and cost-sharing with other countries and organizations. For example, international research activities support the Organisation for Economic Co-operation and Development/Nuclear Energy Agency multilateral projects; multilateral/bilateral research sponsored by other organizations, and bilateral cooperative research programs sponsored by the NRC. International cooperative research programs provide access to operating experience from foreign reactors, which contributes to NRC's knowledge base, and the development of risk-informed approaches to regulation.

Reactors Research

This product area supports research activities designed to: ensure that regulations and regulatory processes have sound technical bases, and that bases are refined as new knowledge develops; prepare for changes in the nuclear industry that could have safety implications; develop improved methods to carry out regulatory responsibilities; and maintain an infrastructure of expertise, facilities, analytical capabilities, and data/computer codes to support regulatory decisions. This research program supports the agency's Reactor Oversight Program and the implementation of the Accident Sequence Precursor Program.

Advanced Reactors Research

Research activities included in this product area support design certification and pre-application review activities for non-light water reactor (LWR) designs. Projects also include technical development activities to support the review of non-LWR designs. This includes the development of expertise, tools, and data to support the certification review of non-LWR designs in areas such as thermal hydraulics, severe accidents, nuclear analysis, probabilistic risk assessment, human performance, materials performance, and seismic/structural analysis.

New Reactors Research

This product area contains research activities that support design certification and pre-application review activities for LWR designs. It also includes technical development activities to support the review of LWR designs. This includes the development of expertise, tools, and data to support the certification review of LWR designs in areas such as thermal hydraulics, severe accidents, nuclear analysis, probabilistic risk assessment, human performance, materials performance, and seismic/structural analysis.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 1. In 2012, the DC Circuit Court remanded the NRC's waste confidence rule. When will the revised rule become final?

ANSWER.

If approved by the Commission, the NRC staff expects that the rule will be final in the fall of 2014.

1a. Given that spent fuel pool integrity was an issue raised by the DC Circuit in their remand of the waste confidence rule, how will the NRC satisfy the court if the seismic safety of the spent fuel pools remains an open question still under review?

ANSWER.

The NRC is addressing the court's remand by issuing a generic environmental impact statement (EIS) that addresses environmental impacts of continued storage of spent fuel after the licensed life of a reactor. This includes an analysis of the environmental impacts of spent fuel pool fires and spent fuel pool leaks caused by hazards, using existing technical studies as a basis for the environmental analysis. The NRC is confident that the environmental impact statement will satisfy the agency's obligations under the National Environmental Policy Act with respect to continued storage of fuel after the licensed life of a reactor.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 2. Following the DC Circuit Court's remand of the waste confidence rule, the NRC instituted a moratorium on issuing certain licensing actions like new plants and license renewals. When will the waste confidence moratorium officially end?

ANSWER.

As noted in response to Question 1, if the Commission approves a new final rule and a generic environmental impact statement, both could be issued in the fall of 2014, at which time licensing decisions can resume.

2a. Does the NRC have a plan to ensure those licensing actions caught in the moratorium will be issued in a timely manner?

ANSWER.

The NRC has put in place plans to minimize the impact on licensing actions in which final licensing decisions are postponed pending final Commission action on the court's remand. Specifically, the NRC continues to work on all reviews of license applications and adjudications, other than those involving waste confidence issues, have also been ongoing. Once the court's remand is addressed, the Commission will issue a decision explaining how licensing actions are to proceed. The NRC does not anticipate a surge in work that would necessitate a plan outside of its usual license-review process.

The NRC staff continues to work toward completing the reviews of license renewal applications during the moratorium. By September 2014, the staff expects to complete its safety and environmental reviews regarding the license renewal application for Limerick Generating Station, Units 1 and 2. The staff issued the final Safety Evaluation Report (SER) in January 2013, and a supplemental SER will be issued in September 2014 to address application updates since the completion of the final SER. The final Supplemental Environmental Impact Statement (EIS) will be issued in August 2014. The licensing decision is expected in early November 2014; however no final action can be issued until the court's remand has been addressed. Based on the current schedule for the waste confidence rulemaking, no other license renewal decision is expected to be impacted, and the NRC continues to work towards completing the applications on the established schedules.

The NRC staff also continues to work towards completing the reviews of new reactor combined licenses while the rulemaking is on-going; neither the schedules of the combined license reviews or the NRC staff's ability to move these items to closure have been adversely impacted by the rulemaking. Currently, no licensing actions for combined licenses are expected to be impacted by the rulemaking, and the NRC continues to work towards completing the applications on the established schedules.

Finally, if the Commission votes to approve and issue the final rule and generic environmental impact statement, the Calvert Cliffs and Prairie Island Independent Spent Fuel Storage Installation renewals, which have been affected by the agency's efforts to address the court's remand, will promptly resume, with sufficient time to render licensing decisions without significant schedule impacts.

2b. One item caught in the moratorium is a new plant license for Watts Bar 2 in Tennessee. Is the NRC still on track to issue that license in Dec. 2014, as Chairman Macfarlane testified in our Dec. 12, 2013, hearing?

ANSWER.

The NRC staff's review of the Tennessee Valley Authority's (TVA) Operating License application for Watts Bar Nuclear Plant Unit 2, while mostly complete, is still in progress. Issuance of a final operating license for this facility is dependent on the readiness of the licensee and the Commission's decisions regarding the final rule and generic environmental impact statement to address the court's remand. The NRC staff continues to document its findings in supplements to the safety evaluation report (SER) and construction inspection reports to ensure that TVA has met the applicable regulatory requirements. Currently, assuming the licensee's preparations are complete and the Commission votes to approve and issue the final rule and generic environmental impact statement, the NRC anticipates issuing a decision on Watts Bar 2's application for an operating license in the second quarter of fiscal year 2015.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 3. Page 151 of the NRC budget indicates that corporate support expenditures for FY 2014 of \$384 million a difference of \$102 million from the \$486 million indicated in the NRC's fee recovery rule for FY 2014. Please explain this discrepancy.

ANSWER.

Corporate support components are represented differently in the FY 2015 Congressional Budget Justification (CBJ) and the FY 2014 Fee Rule (Fee Rule). Page 151 of the CBJ, which Chairman Macfarlane referenced, shows an FY 2014 corporate support budget of \$384 million, whereas the Fee Rule provides for an amount of \$486 million. In accordance with OMB circular A-25 (User Charges), the Fee Rule considers managers, administrative assistants, and other support personnel as well as the budget of the Office of the Inspector General to be "corporate support" components for the purpose of calculating the overall hourly Fees for Services rate under 10 CFR Part 170. The CBJ, on the other hand, allocates managers, administrative assistants, and other support personnel to the direct program areas for which they commit the majority of their time (e.g. Operating Reactors or Fuel Facilities).

Another difference between the Fee Rule and the CBJ is that the Integrated University Program grants budget (\$15 million) is considered a direct program cost under the Fee Rule, but corporate support under the CBJ. This distinction is made because grant funds are considered part of the 10% fee relief, and all fee relief is treated as direct work within the Fee Rule.

As I testified during the hearing, we are reducing corporate support by combining and centralizing administrative functions across the agency, and we are looking at where the agency and the industry will be in 5-6 years from now so that we can appropriately resize and restructure the agency to address the future. The FY 2015 request for corporate support is \$362 million, which represents a decrease of \$22 million when compared to FY 2014.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 4. NRC staff spent over two years studying the safety of spent fuel pools—something they have studied more than ten times before, examining whether there was a safety benefit that warranted expedited transfer into dry casks. Their conclusion was that the risk of an offsite release of radiation was one in ten million years and that regulatory action was unnecessary. The staff submitted their recommendation on November 12, 2013, and the Commission has yet to complete their consideration of this matter.

4a. How much was spent on this issue, both costs and staff time (in FTE)?

ANSWER.

The NRC staff provided two staff papers to the Commission that examined the potential risks and consequences of a spent fuel pool fire and a generic regulatory analysis that examined the safety benefit of expediting the transfer of spent fuel into dry storage casks. They were the “Staff Evaluation and Recommendation for Japan Lessons-Learned Tier 3 Issue on Expedited Transfer of Spent Fuel,” dated November 12, 2013), and the “Consequence Study of a Beyond-Design-Basis Earthquake Affecting the Spent Fuel Pool for a U.S. Mark 1 Boiling-Water Reactor,” dated October 9, 2013, more commonly known as the Spent Fuel Pool Study.

The NRC staff concluded that expedited transfer of spent fuel to dry cask storage would provide a minor or limited safety benefit. Therefore, the staff recommended to the Commission that no further generic assessments be pursued related to possible regulatory actions to require the expedited transfer of spent fuel to dry cask storage. The Commission recently approved this recommendation, “Staff Evaluation and Recommendation for Japan Lessons-Learned Tier 3 issue on Expedited Transfer of Spent Fuel”, dated May 23, 2014. The Commission also asked the staff to provide further information such as the potential benefits of alternate spent fuel loading patterns and seismic re-evaluations of spent fuel pools. The Commission decision on expedited transfer of spent fuel to dry cask storage closed out one of the Japan Lessons Learned activities that were identified in response to the Fukushima event.

The approximate costs associated with the development of the two policy papers are as follows:

Total Cost and Staff Time:	\$1,789,000 (Inclusive of 10.7 FTE)
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4b. Please provide the dates each Commissioner voted on this matter.

ANSWER.

Chairman Macfarlane voted on 4/8/14
 Commissioner Svinicki voted on 1/9/14
 Commissioner Apostolakis voted on 4/11/14
 Commissioner Magwood voted on 1/29/14
 Commissioner Ostendorff voted on 1/10/14

The Commission completed consideration of this matter with issuance of a Staff Requirements Memorandum dated May 23, 2014.

4c. Please explain the reasons for any extensions of voting on this matter.

ANSWER.

Commissioners are obligated to make informed decisions regarding matters of safety and security. In this instance, additional information was required from the NRC staff to help two Commissioners with their respective analyses. They received briefings from the NRC staff and engaged in additional study prior to establishing their policy positions, and crafting their votes. These briefings and the additional time needed to evaluate the NRC staff's analysis of the issue, and the completion of a thorough discussion of their policy position, as reflected in their votes, were the bases for the time committed to meeting their responsibilities as Commissioners.

4d. Considering the time and focus dedicated to this Tier 3 issue on which the staff recommended no further regulatory action, please describe what actions the Commission is taking to ensure that the regular licensing workload will no longer be impeded or delayed in favor of matters of such low safety significance.

ANSWER.

The NRC continues to examine, prioritize, and combine activities with a focus on safety. For example, the Commission directed the NRC staff on April 24, 2014 to take actions to address the backlog of licensing actions. Finally, the expedited spent fuel transfer study was accelerated because of a connection to the waste confidence rulemaking, and not because of its potential safety significance.

4e. As the NRC proceeds to consider matters in Tiers 2 and 3, please describe how the Commission plans to ensure that items with slight safety benefits are dealt with in a more efficient and timely fashion.

ANSWER.

The NRC is currently devoting the majority of its Fukushima lessons learned resources toward the implementation of the Near Term Task Force (NTTF) Tier 1 recommendations, which were identified as those needing to be addressed without delay. Many of the Tier 2 recommendations have been merged with other Tier 1 activities due to inherent similarities. Many of the Tier 3 recommendations were classified as such because they are reliant on the outcome of Tier 1 recommendations and/or require resources that are being expended on Tier 1 activities. For the most part, the Tier 3 items involve performing additional evaluations or research studies to address technical questions and to determine what, if any, safety enhancements might be warranted. The NRC will use normal agency processes and guidance (e.g., backfit and regulatory analysis guidelines) to determine whether a regulatory action is warranted for any of the Tier 3 recommendations.

4f. Please explain how the Commission plans to return its attention to only those items with greater safety benefit instead of diverting NRC and licensee attention to such matters of slight safety significance.

ANSWER.

The NRC has used its established policies and procedures to ensure that it can prioritize and act on those items with the greatest impact on public health and safety. The Commission and NRC staff have paid particular attention to making sure that the Fukushima-related activities have not adversely affected the safe operation of nuclear power plants. The NRC currently has an organization whose resources are dedicated to the implementation of the Near Term Task Force (NTTF) Tier 1 recommendations. This organization, the Japan Lessons Learned Division (JLD), is slated to be dissolved upon completion of a substantial portion of the Tier 1 activities, which is expected to occur in late 2016 or early 2017, consistent with the Commission-established schedules for Tier 1 activities. Upon dissolution of the JLD, the resources that were dedicated to the Tier 1 activities will return to the NRC's line organizations to continue working on assignments through normal agency processes. Any remaining Tier 2 and Tier 3 recommendations not completed prior to the dissolution of the JLD will be considered through normal agency processes that account for the safety significance of a regulatory action and the resources available to complete the action.

4g. Given the NRC had sufficient funds to expend resources on an item with such low safety significance that has been studied ten times before, please explain why the NRC needs additional funding and staff.

ANSWER.

The actual FTE needs in FY 2015 for this issue are comparable to FY 2014.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 5. Chairman Macfarlane testified that the sharp increase in 10 CFR Part 171 fees billed to reactor operators was due to several factors-including the impacts of sequestration reductions in 2013 and an accounting error of approximately \$20 million. The NRC was funded at the FY 2013 level during the pendency of the FY 2014 continuing resolutions until the final FY 2014 Omnibus Appropriations bill was enacted and NRC was appropriated the full amount of its budget request, unexpectedly receiving a windfall appropriations amount upon enactment of the FY 2014 Omnibus Appropriations bill.

5a. Please provide a detailed explanation of reductions taken in early FY 2014 while NRC was operating under a CR, including deferred, delayed, or cancelled activities and actions.

ANSWER.

The NRC budgeted at the FY 2013 sequestered level during the FY 2014 continuing resolution. Activities that were deferred at the outset of the FY 2014 fiscal year included:

- Research activities in the Operating Reactors Business Line. Examples include delays in the Level III Probabilistic Risk Assessment; responses to the NRC's Risk Management Task Force recommendations; key materials performance work regarding reactor pressure vessel integrity and steam generator research; accident consequence computer code development and assessment; cable fire testing; and, a cancer risk study.
- New reactor combined license application reviews associated with the Bell Bend, Calvert Cliffs, South Texas Project, and Turkey Point combined license applications, and the Public Service Enterprise Group, Incorporated early site permit application at Salem County, New Jersey.

Once funding was made available, these activities were resumed.

5b. Please provide a detailed explanation of actions taken by NRC to modify the FY 2014 spending plan upon receipt of the windfall funding increase arising from passage of the FY 2014 Omnibus Appropriations bill, including any activities or actions that were resumed or accelerated in an effort to return to schedule.

ANSWER.

The apparent FY 2014 funding increase was a result of a comparison to reduced FY 2013 funding levels under sequestration. During FY 2013 sequestration and the FY 2014 continuing resolution, the NRC developed plans to operate at reduced funding levels. Once the agency's full FY 2014 budget was received the NRC resumed work that had been delayed or deferred. For example, significant activities that were resumed in FY 2014 included:

- Research activities in the Operating Reactors Business Line including the Level III Probabilistic Risk Assessment; responses to the NRC's Risk Management Task Force recommendations; key materials performance work regarding reactor pressure vessel

integrity and steam generator research; accident consequence computer code development and assessment; cable fire testing; and, a cancer risk study.

- New reactor combined license application reviews associated with the Bell Bend, Calvert Cliffs, South Texas Project and Turkey Point combined license applications, and the Public Service Enterprise Group, Incorporated early site permit application at Salem County, New Jersey.

NRC plans to obligate all available funds this fiscal year.

5c. Please provide the NRC's current amount of "carry-over" funding.

ANSWER.

Approximately \$37.2 million is available carryover funding, including \$3.5 million from the Nuclear Waste Fund (NWF). The total available carryover by Funds Source is shown below.

NRC Carryover Funding as of May 31, 2014

Funds Source	Total Available Carryover
Fee Based & General Funds	\$ 31.9
NWF	3.5
Office of Inspector General	\$ 1.7
Total	\$ 37.2

5d. Please discuss NRC's plans to treat the FY 2014 appropriations windfall as an over collection which would, in turn, be used to offset fee collections in FY 2015.

ANSWER.

The NRC is required by Omnibus Budget Reconciliation Act of 1990 (OBRA- 90), as amended, to collect fees in order to recover approximately 90 percent of its budget authority. In accordance with that statute, the NRC must collect the mandated level of fees by the end of the fiscal year to which they are attributed (in this case, September 30, 2014). Neither the late receipt of FY 2014 appropriations, nor the unobligated balances from prior year's appropriations have any impact on the agency's obligation to recover 90 percent of its current year budget authority in the year appropriated. However, if fees in excess of the 90 percent requirement were collected one year (possible because of unanticipated collections after the final rule was published), the following year's fee recovery would be reduced by an equivalent amount.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 6. Please describe what actions have been taken to restore efficiency and predictability to the power uprate program, given the concerns raised about this issue in our Dec. 12, 2013, hearing.

ANSWER.

The NRC's operating reactor power uprate program has been effective. The NRC has completed reviews of 154 applications for power uprates that added over 7,000 megawatts of electric power capacity to the U.S. electrical grid since the 1970's. This is roughly the equivalent of seven new large electrical generating facilities. The NRC has approved six power uprates so far this fiscal year (FY). There is also one application under active review, and two applications on hold waiting for licensees to provide necessary information.

The NRC has seen a significant reduction in new power uprate applications, but power uprates remain a high priority for the Commission. The NRC staff has been directed to inform the Commission of technical or timeliness issues that arise related to power uprates. The NRC continues to have staff dedicated to the power uprate program, which includes reviewing power uprate licensing requests and maintaining related procedures, guidance, and timeliness goals. These activities help ensure the efficiency and predictability of the power uprate program, and continued attention by NRC leadership.

In 2012, as part of a lessons-learned review of the power uprate program, the NRC changed the timeliness goals for uprates to provide more predictability to power uprate reviews. These changes were necessary to reflect NRC safety review requirements and to incorporate experience gained from reviews conducted to date. The revised timeliness goals enable the staff to complete the appropriate safety review, support management oversight of the review activities, and provide realistic targets so industry can gauge expectations for review times.

Timeliness goals for reviewing power uprate applications depend on licensees providing all the information the NRC staff needs to determine whether the application meets all regulatory requirements, thus ensuring public health and safety through the completion of the appropriate safety reviews. In some cases, the timeliness goals for power uprates have not been met due to the NRC's identification of safety and technical issues, review of operating experience, and the licensees requiring time to address these issues. Delays have also occurred as a result of licensee proposed engineering changes beyond the scope of a typical uprate application. Some power uprate applications recently reviewed were impacted by the agency's post-Fukushima activities, particularly as NRC staff resources in some specialized technical disciplines have been redirected.

The NRC staff continues to participate in discussions with stakeholders, including the nuclear industry, on enhancements to the power uprate program. As an example, the NRC staff participates in activities such as the Nuclear Energy Institute Licensing Action Task Force. As part of that effort, the NRC staff piloted a pre-application meeting process to improve the quality of discussions and the documenting of decisions regarding power uprate applications. Additionally, the NRC staff is reviewing topical reports supporting resolution of long-standing

technical issues, which should improve the efficiency of the NRC review of some power uprate applications.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John Shimkus

QUESTION 7. I understand a foreign country has asked the NRC for certification of their reactor design for construction, not here in the U.S., but in another country. Considering the NRC is taking seven to eight years to review designs planned for construction here in the U.S., why is the NRC freelancing internationally instead of completing its work on domestic applications?

ANSWER.

The Korea Hydro & Nuclear Power Company (KHNP) approached the NRC in 2012 to discuss certification of its APR-1400 design under NRC's regulations with the stated intent of marketing this design to U.S. utilities. While versions of the APR-1400 have been and are being constructed in other countries, the design submitted for NRC design certification will be specific to the U.S. and will only be certified if it meets applicable U.S. regulations. The NRC does not make business decisions for U.S. electricity producers about what designs they might seek to license and build. Nor does the NRC's statutory mandate allow it to prioritize one application over another, or reject an application for non-technical or non-safety related reasons. Rather, NRC's role in this process is to make certain that any designs certified by the NRC meet applicable standards for licensing, construction, and operation in the U.S.

7a. The NRC refused to accept this application late last year. Since the NRC had been planning to start reviewing this application and that work is now delayed, will this situation cause the NRC to offset the lost revenue by increasing operating reactor fees?

ANSWER.

Korea Hydro and Nuclear Power Company (KHNP) / Korea Electric Power Corporation (KEPCO) submitted an application for certification of the Advanced Power Reactor 1400 to the NRC on September 30, 2013. The NRC subsequently conducted a thorough review of the application, and on December 17, 2013 notice was given to KHNP and KEPCO that additional information was required to process the application and, therefore, the NRC had decided not to accept the application for design certification at this time. While the NRC awaits KHNP/KEPCO's revised application, the NRC has shifted resources to other 10 CFR 170 fee-for-services work. As a result, the NRC was able to maintain the balance of fees collected under 10 CFR Part 170, and no adjustment to the annual fees (10 CFR Part 171) charged to operating reactor licensees was necessary.

7b. Since post-Fukushima work is, in many cases, diverting scarce technical resources away from other routine work, why would the NRC expend resources to review a foreign design for construction in a foreign country?

ANSWER.

As stated in response to Question 7 related to KHNP, the design certification application that KHNP is expected to submit later this year will be intended for domestic applications by U.S. utilities. The NRC will perform the review of this design on a schedule that reflects budgeted resources and appropriate NRC priority.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Joseph R. Pitts

QUESTION 1. Please provide a breakdown of the budgeted and actual resources for each tier of post-Fukushima activities for FY 2012, 2013, 2014, and 2015 including the following information:

- a. Cost estimates and actual costs.
- b. The estimated number of FTE's and the actual number of FTE's; and
- c. The estimated amount of contract support and the actual amount of contract support.

ANSWER.

a. The following table represents the total resources for Fukushima Tiers 1, 2, and 3 activities inclusive of contract support dollars and FTE:

Fiscal Year	Budgeted (\$K)	Actuals* (\$K)
2012	7,504	8,329
2013	19,152	19,137
2014	26,293	Not available
2015	26,617	Not available

b.c. The following table represents the total resources for both contract support dollars and FTE for Fukushima Tiers 1, 2, and 3 activities:

Fiscal Year	Contract Support (\$K)		Full Time Equivalents	
	Budgeted	Actuals	Budgeted	Actuals*
2012	2,000	2,405	35.3	Not available
2013	6,207	8,584	84.9	Not available
2014	10,325	Not available	99.8	Not available
2015	10,431	Not available	99.3	Not available

* The method used to capture resources spent on post-Fukushima activities is not structured to report FTE actuals by tier.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Robert E. Latta

QUESTION 1. For the purposes of budgeting, how does the NRC estimate how much it expects to recover in 10 CFR Part 170 fees? Please provide the projections for recovery of 10 CFR Part 170 fees used in each of the budgets for the past 10 years and for FY 2015 so that we can compare the accuracy of NRC's projections for 170 fees with actual collections.

ANSWER.

The NRC estimates the amount of 10 CFR part 170 fees based on established fee methodology guidelines (42 FR 22149; May 2, 1977), which specifies that the NRC has the authority to recover the full cost of providing services to identifiable beneficiaries. The NRC uses these established guidelines to apply the most current financial data and workload projections to calculate the 10 CFR part 170 fee estimates.

Current financial data include: 1) four quarters of the most recent billing data (hourly rate invoice data); 2) actual contractual work charged (prior period data) to develop contract work estimates; and 3) the number of FTE hours charged, multiplied by the NRC professional hourly rate. Below please find the ten (10) years' 10 CFR part 170 projections as well as the proposed FY 2014 rule. The FY 2015 proposed fee rule is expected in March 2015:

	Final Fee Rule: Estimated 10 CFR Part 170 Fees
FY 2015	[FY15 Proposed Fee Rule expected in March 2015]
FY 2014	\$324.5 [Proposed Rule]
FY 2013	\$348.0
FY 2012	\$345.2
FY 2011	\$369.3
FY 2010	\$357.3
FY 2009	\$333.9
FY 2008	\$291.8
FY 2007	\$205.1
FY 2006	\$183.3
FY 2005	\$157.5
FY 2004	\$149.9

* All figures in millions of dollars

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Robert E. Latta

QUESTION 2. Considering that the NRC's fee recovery rules for FY 2013 and FY 2014 each accounted for the cessation of operation by two reactors and that all four of these reactors were shut down prior to NRC finalizing its FY 2015 budget, what effort did the NRC make to adjust its 2015 budget to reflect the workload reduction due to the loss of those four reactors?

ANSWER.

There was a reduction in the baseline reactor inspection program resources commensurate with the shutdown of these plants; however, some resources are retained for each site to complete the decommissioning process. Resources support decommissioning program activities such as developing regulations and guidance to assist staff and the regulated community; conducting research to develop data, techniques, and models used to assess public exposure from the potential release of radioactive material resulting from site decommissioning; reviewing and approving decommissioning plans (DPs) and license termination plans (LTPs); reviewing and approving license amendment requests for decommissioning facilities; inspecting licensed and non-licensed facilities undergoing decommissioning; developing environmental assessments (EAs) and environmental impact statements (EISs) to support the NRC's reviews of decommissioning activities; reviewing and approving final site status survey reports; and conducting confirmatory surveys.

The NRC ensures that safety requirements are being met throughout the decommissioning process by reviewing decommissioning or license termination plans, conducting inspections, and monitoring the status of activities to ensure that radioactive contamination is reduced or stabilized. Additionally, the NRC will continue to carry out its responsibility to conduct annual decommissioning financial assurance reviews of the submissions for each of the power reactors currently in decommissioning, which includes oversight of decommissioning financial assurance for power and non-power reactors.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Robert E. Latta

QUESTION 3. In addressing the Nuclear Energy Assembly on May 21, 2014, Chairman Macfarlane stated:

"Court decisions, a foreign reactor accident, and government-wide financial challenges have each impacted our current course, in many cases diverting scarce technical resources away from other routine work. "

Please provide a list of routine licensing actions which the NRC has delayed by diverting technical resources. Please describe what the NRC is doing to improve its ability to complete routine licensing actions in a timely fashion.

ANSWER.

A total of 64 routine licensing activities have been delayed by diverting technical resources to Fukushima-related reviews. A list of these activities is provided below. The Commission directed the NRC staff on April 24, 2014, to take actions necessary to reverse the backlog of licensing actions. Accordingly, resources have been and will continue to be shifted within the operating reactors program office and from other program offices to allow for more efficient completion of the regular licensing workload. Additionally, where appropriate, contract resources are being identified to supplement the staff's efforts. The NRC continues to examine, prioritize, and combine activities with a focus on safety.

AREVA - EMF-2310(P)(A), Revision 1, Supplement 1, Revision 0, "SRP Chapter 15 Non-Loss of Coolant Accident (LOCA) Methodology for Pressurized Water Reactors (PWRs)"

ARKANSAS NUCLEAR 1 - Revision to Technical Specification (TS) 2.1.1.1, Reactor Core Safety Limits

BEAVER VALLEY 1 - Removal of TS Requirement to Perform End-of-Life MTC Measurement

BEAVER VALLEY 2 - Removal of TS Requirement to Perform End-of-Life MTC Measurement

BRAIDWOOD 1 - Request to Revise TS (TS) 3.3.6

BRAIDWOOD 2 - Request to Revise TS (TS) 3.3.6

BROWNS FERRY 1 - TS-478 - Addition of Analytical Methodologies to TS 5.6.5 for BFN Units 1, 2 and 3 and Revision of TS 2.

BROWNS FERRY 2 - TS-478 - Addition of Analytical Methodologies to TS 5.6.5 for BFN Units 1, 2 and 3 and Revision of TS 2.

BROWNS FERRY 3 - TS-478 - Addition of Analytical Methodologies to TS 5.6.5 for BFN Units 1, 2 and 3 and Revision of TS 2.

BWR OWNERS GROUP - NEDC-33608P, LTR BWR ECC Suction Strainer In-Vessel Downstream Effects

BYRON 1 - Request to Revise TS 3.3.6
 BYRON 2 - Request to Revise TS 3.3.6
 CALLAWAY - Revise TS 3.7.9, UHS
 CALVERT CLIFFS 1 - Enhancements to Diesel Generator Surveillance Requirements
 CALVERT CLIFFS 2 - Enhancements to Diesel Generator Surveillance Requirements
 CATAWBA 1 - Moderator Temp Coeff SR changes TS 3.1.3 and 5.6.5
 CATAWBA 2 - Moderator Temp Coeff SR changes TS 3.1.3 and 5.6.5
 COLUMBIA GENERATING STATION - Amendment for PRNM/ARTS/MELLA
 COLUMBIA GENERATING STATION - TS Interpretation - Offsite Power Supply
 EPRI SDA - TR WCAP 17096-NP, Revision 2, December 2009, "Reactor Internals Acceptance Criteria Methodology & Data Requirements"
 FARLEY 1 - Condensate Storage Tank volume
 FARLEY 2 - Condensate Storage Tank volume
 FERMI 2 - License Amendment Request for Measurement Uncertainty Recapture Power Uprate
 GE NUCLEAR ENERGY - TRACG Application for Emergency Core Cooling Systems / Loss-of-Coolant-Accident Analyses for BWR/2-6
 GLOBAL NUCLEAR FUEL (GNF) - TR - Amendment 37 to GESTAR II (NEDE-24011-P-A-19 / NEDE-24011-P-A-19-US)
 GRAND GULF 1 - Feedwater Temp Reduction LAR
 HF CONTROLS - Review of Amendments to safety evaluation for the HFC-6000 Safety Control System Topical Report
 INDIAN POINT 3 - Emergency Diesel Generator Fuel Oil System
 MCGUIRE 1 - Moderator Temp Coeff SR changes TS 3.1.3 and 5.6.5
 MCGUIRE 1 - TS 3.7.7 Nuclear Service Water System
 MCGUIRE 2 - Moderator Temp Coeff SR changes TS 3.1.3 and 5.6.5
 MCGUIRE 2 - TS 3.7.7 Nuclear Service Water System
 NINE MILE POINT 1 - License Amendment Request - Diesel Generator Initiation - Degraded Voltage Time Delay Setting Change
 OCONEE 1 - Borated Water Storage Tank Purification Using Non-Seismic Reverse Osmosis System

OCONEE 2 - Borated Water Storage Tank Purification Using Non-Seismic Reverse Osmosis System

OCONEE 3 - Borated Water Storage Tank Purification Using Non-Seismic Reverse Osmosis System

PALO VERDE 1 - Request for Amendment to Eliminate the Use of the Term CORE ALTERATION in the TSs

PALO VERDE 1 - TSTF-500 DC Electrical Rewrite

PALO VERDE 2 - Request for Amendment to Eliminate the Use of the Term CORE ALTERATION in the TSs

PALO VERDE 2 - TSTF-500 DC Electrical Rewrite

PALO VERDE 3 - Request for Amendment to Eliminate the Use of the Term CORE ALTERATION in the TSs

PALO VERDE 3 - TSTF-500 DC Electrical Rewrite

PEACH BOTTOM 2 - Extended Power Uprate

PEACH BOTTOM 2 - Revise Normal Heat Sink Operability Requirements

PEACH BOTTOM 3 - Extended Power Uprate

PEACH BOTTOM 3 - Revise Normal Heat Sink Operability Requirements

PRAIRIE ISLAND 1 - LAR to Add a Methodology to TS 5.6.5 - COLR

PRAIRIE ISLAND 2 - LAR to Add a Methodology to TS 5.6.5 - COLR

RIS - Staff position on the clarification of submitting of alternatives under 10 CFR 50.55

SEABROOK 1 - SFP LAR

SUSQUEHANNA 1 - Change to TS 2.1.1 - Low Pressure Safety Limit and Reference Changes

SUSQUEHANNA 1 - Change to TS SR 3.8.1.19-Increase to DG E Minimum Steady State Frequency

SUSQUEHANNA 1 - TS SR-Increase Diesel Generator Minimum Steady State Voltage

SUSQUEHANNA 2 - Change to TS 2.1.1 - Low Pressure Safety Limit and Reference Changes

SUSQUEHANNA 2 - Change to TS SR 3.8.1.19-Increase to Diesel Generator E Minimum Steady State Frequency

SUSQUEHANNA 2 - TS SR-Increase Diesel Generator Minimum Steady State Voltage

TOSHIBA CORPORATION - Topical Report on Field Programmable Gate Array

WATTS BAR 1 - Amendment to Update FSAR Re Changes to Hydrologic Analysis

WESTINGHOUSE VENDOR - Data Satisfying CENPD - 404-P-A SER Condition 4

WESTINGHOUSE VENDOR - WCAP-16182-P-A, Revision 1, "Westinghouse BWR Control Rod CR 99 Licensing report - Update to Mechanical Design Limits"

WESTINGHOUSE VENDOR - WCAP-16996-P Volumes I, II, & III, Revision 0 and WCAP-16996-NP, Volumes I, II, & III, Revision 0

WESTINGHOUSE VENDOR - WCAP-17503-P, Revision 0 and WCAP-17503-NP, Revision 0, "Westinghouse Generic Setpoint Control Program Recommendations"

WESTINGHOUSE VENDOR - WCAP-17721, "Westinghouse Containment Methodology P&E Release" topical report review

WOLF CREEK 1 - Increase Voltage Limit for Diesel Generator Load Rejection Surveillance Requirement

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Robert E. Latta

QUESTION 4. In addressing the Nuclear Energy Assembly on May 21, 2014, Chairman Macfarlane stated:

“Of the 18 combined license applications we anticipated, licenses have been issued for two reactor sites and an additional eight are under active review, but six application reviews have now been suspended at your request and two applications have been withdrawn. In response, the NRC has had to define a path to redeploy underused resources to other priorities or transition to a smaller technical team. A similar story can be told with regard to small modular reactors. To borrow a metaphor, running a government agency is akin to driving an aircraft carrier, not a cigar boat. I can’t turn this ship on a dime.”

Given this reduction in work load and your ability to redeploy underused resources, please explain the NRC’s request for additional resources and FTE’s in the FY 2015 budget.

ANSWER.

The NRC’s budget in FY 2015 includes 3,819 FTE’s (not including the Office of the Inspector General), which is essentially flat from FY 2014. The increase of 66 FTE in FY 2015 is attributable to a reallocation of FTE’s that occurred in FY 2014 to accommodate other required programs and priorities such as the Integrated University Program, which was mandated through the FY 2014 appropriation. This has not been reflected in FY 2015. The NRC is continuing to assess appropriate staffing levels.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Adam Kinzinger

QUESTION 1. Given that the agency expects to complete its work on the waste confidence rulemaking this fall, how much has been budgeted for FY 2015 for this work? Has the NRC budgeted any resources in anticipation of a legal challenge to the revised waste confidence rule?

ANSWER.

Waste confidence rulemaking work has not been budgeted for FY 2015. The NRC has budgeted resources for a potential legal challenge.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Adam Kinzinger

QUESTION 2. The NRC's written testimony for this hearing cites a savings of \$37 million dollars in administrative support costs since 2010, a reduction of 17%. Yet a review of the NRC's fee recovery rule shows corporate support costs have grown from \$330 million in FY 2010 to \$486 million in FY 2014. Please explain the discrepancy between the fee recovery rule and the written testimony. Since previous efforts clearly have not reduced corporate support costs, please describe what steps the NRC will take to reign in growing corporate support costs?

ANSWER.

The savings of \$37.2 million (in FY 2010 constant dollars) reflected in the NRC's written testimony is specifically focused on the portion of the Corporate Support budget that funds salaries and benefits of support personnel. The \$37 million in savings is presented in 2010 constant dollars. In FY 2010, salaries and benefits for support personnel were budgeted at \$221.9 million, whereas the FY 2015 request, when converted to 2010 constant dollars, is \$184.7 million, a reduction of \$37.2 million (and a 17% decrease).

The difference between the written testimony and the FY 2014 Fee Rule (\$486 million) is because of the following factors. In accordance with OMB circular A-25 (User Charges), the Fee Rule has a larger estimate for Corporate Support because it considers managers, administrative assistants, and other support personnel, as well as the budget of the Office of the Inspector General to be "corporate support" components for the purpose of calculating the overall hourly Fees for Services rate under 10 CFR Part 170.

In regards to what steps the NRC will take to reign in growing corporate support costs, as I testified during the hearing, we are reducing corporate support by combining and centralizing administrative functions across the agency, and we are looking at where the agency and the industry will be in 5-6 years from now so that we can appropriately resize and restructure the agency to address the future.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Adam Kinzinger

QUESTION 3. Please provide the number of licensing actions and reviews that have been delayed because of Fukushima-related work.

ANSWER.

A total of 64 routine licensing activities have been delayed by diverting technical resources to Fukushima-related reviews. Resources have been and will continue to be shifted within the operating reactors program office and from other program offices to allow for more efficient completion of the regular licensing workload. Additionally, where appropriate, contract resources are being identified to supplement the staff's efforts. The NRC continues to examine, prioritize, and combine activities with a focus on safety.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Bill Johnson

QUESTION 1. Please indicate when the Commission anticipates providing this Committee with a detailed cost and schedule estimate for completing its review of the Yucca Mountain license application.

ANSWER.

In response to direction from Congress, the Commission directed the staff to develop a plan for completing the licensing process for the Yucca Mountain repository construction authorization, which includes the adjudicatory hearing process, and to estimate the resources necessary to implement the plan. The staff's plan is currently being reviewed by the Commission.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable Bill Johnson

QUESTION 2. Since Nuclear Waste Fund money will NOT be used to pay for the NRC's work on alternative disposal strategies for spent nuclear fuel, who will pay for that work: taxpayers or licensees?

ANSWER.

The staff activities to remain cognizant of activities related to alternative disposal strategies for spent nuclear fuel are funded from NRC's appropriations and are recovered through licensee fees. As required by the Omnibus Budget Reconciliation Act of 1990, as amended, the NRC's budget provides for 90 percent fee recovery, less the amounts appropriated for Waste Incidental to Reprocessing and generic homeland security activities. The efforts associated with alternative disposal strategies will be consistent with this approach.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John D. Dingell

QUESTION 1. On November 18, 2013, NRC ordered staff to complete work on the safety evaluation report for Yucca Mountain. In addition, the Commission requested DOE prepare a supplemental environmental impact statement (EIS) in order to complete its environmental review of the application. On February 28, 2014, DOE informed NRC that it will not complete the supplemental EIS, but that it will provide an updated version of its previously issued technical report on the topics to be addressed in the supplement.

1a. What, if any, are obstacles NRC will face in order to complete the supplemental EIS internally?

ANSWER.

There are no known obstacles to completing the environmental impact statement (EIS) supplement, subject to the availability of Nuclear Waste Funds, and further direction from the Commission, as described below.

1b. Does the fiscal year (FY) 2015 budget provide enough resources for NRC staff to finish the supplemental EIS while still completing the SER by January 2015?

ANSWER.

The Fiscal Year (FY) 2015 President's budget does not include resources from the Nuclear Waste Fund (NWF) for Yucca Mountain. However, the NRC has enough unobligated carryover funds appropriated from the Nuclear Waste Fund to complete the Safety Evaluation Report (SER) by January 2015, which remains a top Commission priority. The Commission has directed that staff should plan to develop and issue an EIS supplement. The Commission has directed that this work should not begin until at least the fall of 2014, when work on the SER is substantially complete, and appropriate personnel are available to support the EIS supplement effort. At that time, the staff will submit to the Commission its assessment of remaining NWF funds and its proposed plan to complete the EIS supplement. The Commission will then provide direction on the allocation of funding to this task based on the staff's updated assessment.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John D. Dingell

QUESTION 2. In March 2014, NRC finished loading Licensing Support Network (LSN) documents into a nonpublic library in the NRC's Agencywide Documents Access and Management System (ADAMS). The remaining related task is to complete the processing of the LSN documents into the agency's records.

2a. How does this remaining LSN task impact NRC's timely completion of the supplemental EIS?

ANSWER.

Completing the processing of the Licensing Support Network (LSN) documents into the agency records system has no impact on environmental impact statement (EIS) supplement activities. As noted in the April, 2014 monthly status report on the NRC's activities and utilization of unobligated carryover funds appropriated from the Nuclear Waste Fund, the agency completed activities necessary to make the LSN document collection accessible and searchable in a nonpublic library of the NRC's Agencywide Documents Access and Management System (ADAMS) for use by the staff. Loading of the documents into public ADAMS will be completed only after the Commission review of remaining Nuclear Waste Fund resources this fall, as described in the answer to Question 1b.

Attachment 1 – Questions for the Record
Questions for Chairman Macfarlane on Behalf of the Commission
The Honorable John D. Dingell

QUESTION 3. Commissioner Magwood, on March 19, 2014, it was announced that you would be leaving the agency on September 1, 2014 to become director general of the Nuclear Energy Agency. Commissioner Apostolakis, your term as Commissioner will come to an end on June 30, 2014.

3a. Commissioner Apostolakis, can you provide any indication on whether or not you will be re-nominated before your term expires?

ANSWER.

Commissioner Apostolakis was not re-nominated for a new term as Commissioner.

3b. Has the Commission been given any indication of whether or not Commissioner Magwood's replacement will be nominated before a lapse in service occurs?

Answer.

The Commission has not been informed as to when a replacement may be nominated.

3c. Chairwoman Macfarlane, how would a lapse on appointments to the Commission impact the ability of NRC to effectively carry out its completion of the SER?

ANSWER.

The Commission has functioned with only three members in the past, but it functions best with five sitting members. Should there be vacancies on the Commission when the staff completes the Yucca Mountain SER, the fact that there are vacancies should have no impact on the NRC's ability to complete and issue the SER.

Attachment 2 – Member Requests for the Record
The Honorable Gene Green

QUESTION 1. What percentage of the Commission's budget and fees fund NRC rulemakings?

ANSWER.

Approximately 3 percent of the NRC's FY 2015 and FY 2014 budget total supports rulemaking activities. In FY 2014, 8 percent of the total required annual fee recovery amount supports rulemaking activities. In 2015, the percentage of the total required annual fee recovery amount which supports rulemaking activities has yet to be determined as it is part of the FY 2015 draft fee rule which has not yet been completed.

Attachment 2 – Member Requests for the Record
The Honorable Lois Capps

QUESTION 1. When will the review of Dr. Michael Peck's differing professional opinion be completed and published?

ANSWER.

The Differing Professional Opinion (DPO) Program supports openness and transparency when the process is complete. This particular DPO is still in process and considered pre-decisional and is, therefore, not available for public release at this time. A DPO case is considered closed when a DPO decision is issued without appeal or when a DPO appeal decision is issued. While there are established expectations for how long various steps in the process should take, DPO program staff tend to support adjustments in schedules as needed by all parties involved, so forecasting an exact completion date would be difficult. In addition, if the submitter would like the closed DPO background records made public, a review is performed to support discretionary release. Before records are released a number of considerations, such as security sensitivity, must be weighed.

Questions for Chairman Macfarlane
The Honorable John Shimkus

QUESTION 1. In addressing the Nuclear Assembly on May 21, 2014, Chairman Macfarlane stated:

“Recent changes in the U.S. nuclear fleet have prompted us to place greater focus on decommissioning.”

“But those sites undergoing decommissioning must continue to meet license requirements. The NRC will maintain its oversight of these facilities for years to come, including having resident inspectors at certain sites for the next several years. As sites progress in the decommissioning process, the NRC will account for accompanying changes in regulatory responsibility in its planning.”

1a. Please describe how your statement represents a change from NRC's past practices.

ANSWER.

It does not. The NRC has always maintained oversight of decommissioning power reactors, and the focus on safety has remained the same. But recently, due to an increase in the number of plants shutting down, the agency has had to refocus resources in order to address the shift from operation to decommissioning. Within the last 16 months, the NRC's decommissioning activities have increased with the premature shutdown and entry into decommissioning status of Crystal River Unit 3 (on 02/20/2013), the Kewaunee Power Station (on 05/07/2013), and the San Onofre Nuclear Generating Station, Units 2 and 3 (on 06/12/2013). In addition, the operators of the Vermont Yankee and Oyster Creek power reactors have made public announcements of planned future shutdowns and entry into decommissioning status. The entry of these facilities into decommissioning requires a shift in NRC workload in order to oversee a safe transition into decommissioning. In overseeing the transition, NRC staff is implementing established practices that have been informed by experience. Similar to efforts taken following the permanent shutdown of several power reactors in the 1990s, the NRC has realigned activities to focus on the decommissioning of the four permanently shut-down units and for additional power reactors that may shutdown in the future.

1b. Does your statement reflect the policy position of the Commission? If so, please provide copies of any Commission policies regarding these issues.

ANSWER.

Yes, it does. It is consistent with, "Changes in Staff Regulatory Oversight of Decommissioning Commercial Nuclear Power Reactor Plants" (SECY-02-0198), which describes the agency's policy for the oversight of decommissioning power reactors. This document is included as an attachment to these answers.

Questions for Chairman Macfarlane
The Honorable Lee Terry

QUESTION 1. Please provide a list of the NRC's Chairman's responsibilities as Executive Team Director when the Operation Center is in "Activation" or "Expanded Activation" modes according to the Executive Team Response Procedure.

ANSWER.

In summary, the NRC Chairman, or her designee, as Executive Team Director is the senior agency authority responsible for all NRC actions taken in response to, or recovery from, an emergency involving one of its licensees, or as part of an integrated response by the Federal government under the National Response Framework, when the Headquarters Operations Center is in "Activation" or "Expanded Activation" modes. The Executive Team Director is also the primary NRC spokesperson for the agency. Specific responsibilities include:

- Ensuring the prompt event notification to the appropriate stakeholders, and coordination of, or support to, federal resources necessary for effective emergency response and recovery. Stakeholders include the NRC Commission, federal agencies (e.g., Department of Homeland Security, Federal Emergency Management Agency, Department of Energy, Environmental Protection Agency, Health and Human Services, Department of Agriculture, Federal Bureau of Investigation, and Department of Defense), senior authorities of affected areas (e.g., appropriate state governors, city mayors, and tribal leaders), the White House, Congress, appropriate industry organizations (e.g., Institute of Nuclear Power Operations) and appropriate international organizations (e.g., International Atomic Energy Agency). The Executive Team Director reviews and approves reports, official statements, and press releases concerning the emergency, or appoints these responsibilities to another Executive Team member. The Executive Team Director also activates the News Center to conduct media briefings, and acts as the News Center Spokesperson or appoints another Executive Team member to do so.
- Leading the NRC's independent assessment and oversight of licensee emergency response and recovery actions, and protective action recommendations to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.
- Leading the NRC's issuance of orders to a licensee to prevent an accident or ensure appropriate actions are taken to address an accident in order to protect public health and safety.
- Leading the NRC's issuance of necessary communications or regulatory actions following an emergency having consequences with generic applicability to other licensees.

Questions for Chairman Macfarlane
The Honorable Robert E. Latta

QUESTION 1. In your responses to follow-up questions from the Dec. 12, 2013 hearing you indicated:

"... the NRC has 3871 staff, including the Office of the Inspector General, which is down 368 employees from FY 2010."

However, the NRC's Performance and Accountability Report for FY 2010 indicates the NRC employed 3,981 employees. Please explain the discrepancy.

ANSWER.

As I stated in response to Representative Whitfield's first question for the record following the December 12, 2013 hearing, as of November 16, 2013, the NRC had 3,871 staff, including the Office of the Inspector General. This number represents a decrease of 110 from the number of staff in FY 2010, which was 3,981, as reflected in the Performance and Accountability Report for FY 2010. The number in this report is correct. I would like to correct the record to note that the decrease in NRC staff from 2010 to 2013 was 110, not 368 as previously stated, which was the result of a subtraction error.

As I testified during the hearing on May 7, 2014, we are reducing corporate support by combining and centralizing administrative functions across the agency, and we are looking at where the agency and the industry will be 5 – 6 years from now so that we can appropriately resize and restructure the agency to address the future. To that end, the FY 2015 budget includes 3,896 FTE, which represents the equivalent decrease of 85 staff when compared to 3,981 FTE in FY 2010.

Questions for Chairman Macfarlane
The Honorable Adam Kinzinger

QUESTION 1.

In the hearing, you testified that the NRC had reduced 192 FTE's since FY 2010. In your responses to follow-up questions from the Dec. 12, 2013 hearing, you indicated:

" ... the NRC has 3871 staff, including the Office of the Inspector General, which is down 368 employees from FY 2010

The NRC's Performance and Accountability Report for FY 2010 indicates the NRC employed 3,981 employees. The NRC's FY 2015 budget request projects 3,896 FTEs in FY 2015. Please explain the basis for your conclusion the agency has reduced 192 FTEs since 2010.

ANSWER.

As I stated in response to Representative Whitfield's first question for the record following the December 12, 2013 hearing, as of November 16, 2013, the NRC had 3,871 staff, including the Office of the Inspector General. This number represents a decrease of 110 from the number of staff in FY 2010, which was 3,981, as reflected in the Performance and Accountability Report for FY 2010. The number in this report is correct. I would like to correct the record to note that the decrease in NRC staff from 2010 to 2013 was 110, not 368 as previously stated, which was the result of a subtraction error.

As I testified during the hearing on May 7, 2014, we are reducing corporate support by combining and centralizing administrative functions across the agency, and we are looking at where the agency and the industry will be 5 – 6 years from now so that we can appropriately resize and restructure the agency to address the future. To that end, the FY 2015 budget includes 3,896 FTE, which represents the equivalent decrease of 85 staff when compared to 3,981 FTE in FY 2010.

Questions for Chairman Macfarlane
The Honorable Bill Johnson

QUESTION 1. When Secretary Moniz testified before the Science Committee on April 190, 2014, I asked him about DOE's commitment in a January 6th letter to honor the NRC's request to complete a groundwater supplement to the Yucca Mountain EIS and DOE's subsequent letter to the NRC indicating otherwise. He indicated that he discussed with you his decision to have NRC prepare the EIS supplement. Given that is contrary to the Commission's November 19, 2013, Order, did you discuss Secretary Moniz's proposal with you colleagues before accepting?

ANSWER.

As Chairman of the NRC, I routinely interact with leaders of other federal agencies on topics and activities in which we may have shared responsibilities or a common governmental interest. However, at no time during any interactions with Secretary Moniz was I asked to provide comments on or approval for DOE's decision not to prepare a supplement for the Yucca Mountain high-level waste geologic repository environmental impact statement. Therefore, I did not accept or approve DOE's decision before or after it was made, nor did I discuss approving or disapproving DOE's decision with my colleagues.

Questions for Chairman Macfarlane
The Honorable Bill Johnson

QUESTION 2. In the hearing, I asked a question regarding the NRC's refusal to estimate the costs of carrying out its statutory mandate to complete its review of the Yucca Mountain license application: "Has OMB in any way instructed you either directly or indirectly to withhold such information?" You answered: "I do not believe so." Please clarify your response.

ANSWER.

In response to direction from Congress, the Commission recently directed the staff to develop a plan for completing the licensing process for the Yucca Mountain repository construction authorization and that plan will include an estimate of the resources necessary to complete that process, including the adjudicatory hearing. On a related basis, I reaffirm that OMB has neither directly, nor indirectly, instructed me to withhold an estimate of the cost of completing the NRC's review of the Yucca Mountain license application.

**POLICY ISSUE
INFORMATION**November 8, 2002SECY-02-0198

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: CHANGES IN STAFF REGULATORY OVERSIGHT OF
DECOMMISSIONING COMMERCIAL NUCLEAR POWER
REACTOR PLANTS

PURPOSE:

This paper informs the Commission of changes in staff regulatory oversight of decommissioning commercial nuclear reactor plants. Project management responsibility is being transferred from the Office of Nuclear Reactor Regulation (NRR) to the Office of Nuclear Material Safety and Safeguards (NMSS) earlier in the decommissioning process, to take advantage of NMSS' regulatory expertise in overseeing decommissioning and waste storage facilities.

BACKGROUND:

Currently, as set forth in the March 15, 1995, "Memorandum of Understanding (MOU) Between NRR and NMSS," project management responsibilities are transferred from NRR to NMSS only after the nuclear fuel has been safely removed from the spent fuel pool. As a result, NRR has maintained regulatory oversight of 15 decommissioning plants for many years after the reactors have ceased operation. These plants are either in long-term safe storage or actively working

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toward license termination. These 15 plants have more in common with decommissioning materials licensees temporarily storing and disposing of radioactive waste than commercial reactor plants licensed to operate.

DISCUSSION

The staff has concluded that for efficiency interests transfer, to NMSS, of project management oversight of these facilities earlier in the decommissioning process would result in improvements because NMSS provides regulatory oversight of: (1) out-of-reactor spent fuel storage; (2) disposal of low-level and high-level radioactive wastes; and (3) decommissioning of facilities when their licensed functions are over. Moreover, NMSS has ongoing programmatic oversight regarding decommissioning. Similarly, for power reactors that permanently cease operations in the future and undertake decommissioning, the staff has concluded that the efficiency and effectiveness of regulatory project management can be improved, without affecting licensees, by changing the point at which project management transfers from NRR to NMSS. This decision to change NRC's regulatory oversight strategy for future decommissioning plants is based on the following activities that have been undertaken over the last few years: (1) an interoffice working group that evaluated the decommissioning inspection program and its associated budget; (2) a Decommissioning Management Board to facilitate interoffice (and interregional) coordination, communication, and operating strategy; and (3) insights gained from annual decommissioning counterpart meetings. The plan to transfer responsibilities to NMSS allows NRR to focus its resources on activities associated with operating reactors.

The process of transferring responsibilities is depicted in the Attachment, "Transfer of Commercial Nuclear Power Plants from NRR to NMSS." This "road map" will be used to transfer plants from NRR oversight to NMSS that decommission in the future. This process will ensure that a decommissioning commercial power plant will be in a safe, stable condition before being transferred from NRR to NMSS. This condition will be determined by the successful completion of regulatory and safety milestones that ensure that the plant and its licensing basis, in effect, more closely represent a materials licensee temporarily storing and processing radioactive waste than a commercial power reactor.

Following the "road map" ensures that the commercial power plant is in a condition that minimizes any reactor-related regulatory or safety issues that may arise during or after the transfer of the facility to NMSS. It ensures that the plant is safely shut down and defueled. It also ensures that potential accidents, events, or site activities do not adversely affect co-located facilities. Lastly, it ensures that the facility's licensing basis has been amended to reflect the permanently shut-down and defueled status of the reactor.

The "road map" and the specific staff instructions on the transfer process are provided in two guidance documents that the staff is developing to ensure that future transfers occur efficiently and effectively without burden on the licensee. These procedures will require interoffice concurrence for changes and when implemented will supersede the coordination and communication agreements in the MOU.

Project management oversight of the current decommissioning commercial nuclear reactor plants will be transferred by: (1) shifting 13 of the 15 NRR decommissioning plants to NMSS, under a phased approach; and (2) changing the point at which a future permanently shut-down

and defueled nuclear power plant transfers from NRR to NMSS. This action does not modify, amend, nor otherwise affect the safety or licensing bases of any plant, the governing rules and regulations, licensee activities, or public outreach initiatives. In the first phase, oversight for six reactors (Trojan, Three Mile Island 2, LaCrosse, Rancho Seco, Yankee Rowe, and Humboldt Bay) will be transferred. This phase will be completed by the end of November 2002. In the second phase oversight for seven reactors (Haddam Neck, Maine Yankee, Dresden 1, San Onofre 1, and Zion 1 and 2) will be transferred. The second phase will be completed by the end of January 2003. The Millstone 1 and Indian Point 1 reactors will not be transferred at this time due to extensive external stakeholder interest in these sites (for both the operating and decommissioning plants) that makes it more efficient for NRR to retain, as a single point of contact, project management responsibilities for the permanently shutdown units. There is minimal decommissioning activities at these two sites.

This transfer of regulatory oversight will positively contribute to NRC performance and achieve the goals of NRC's Strategic Plan, because the realignment eliminates the need for redundant licensing project managers and consolidates the staff, working on commercial nuclear power reactor decommissioning, into one office. Further, this realignment improves the use of NRR and NMSS staff by ensuring NRR operational expertise and experience in transitional activities and NMSS expertise in dismantlement, decontamination, and license termination. It secures NMSS decommissioning expertise shortly after a reactor is permanently shut down and shifts NRR safety oversight back to operating nuclear reactors. To ensure the availability of NRR expertise, should NMSS require technical assistance, a management matrix approach will be used by way of coordinated requests.

The transfer of responsibilities will not affect the current NRR oversight responsibilities for decommissioning of test, research, and naval reactors. The regulatory oversight for these facilities is more effectively and efficiently managed by the small, centralized organization, in NRR, that is experienced in the unique regulatory needs of these facilities. In addition, the decommissioning activities associated with these facilities is so small [requiring only about 0.2 full-time equivalent (FTE)] that it would be inefficient to transfer this activity to NMSS.

This plan does not provide for the transfer of any rulemaking or guidance development related to decommissioning power reactors. In a memorandum, "Status of Regulatory Exemptions for Decommissioning Plants," dated August 16, 2002, the staff has described its intent to terminate the integrated decommissioning rulemaking and continue to rely on exemptions from requirements for decommissioning power reactors. The staff will reassess the need for decommissioning rulemaking after the Office of Nuclear Security and Incident Response, through its rulemaking efforts, determines requirements for security and physical protection. NRR has not budgeted resources for either decommissioning rulemaking or guidance development, in Fiscal Year (FY) 2003 or FY 2004. Therefore, if the staff is directed to pursue any rulemaking or guidance development in that time frame, either NRR or NMSS would have to apply its planning, budgeting, and performance monitoring process to reallocate resources from other programs.

The staff has developed a communication plan that includes updating the NRC external web page, to inform stakeholders of these changes.

CONCLUSIONS:

The staff has developed a process for transferring the responsibility for the project management of decommissioning commercial nuclear reactor plants from NRR to NMSS earlier in the decommissioning process. The outcomes of the transfer will be: (1) a clear separation of reactor operation from reactor decommissioning, thus reducing the number of organizations responsible for decommissioning; (2) securing NMSS expertise and experience earlier in decommissioning, thus improving timely implementation of dismantlement, decontamination, and license termination efforts; and (3) basing the plant transfer on safety and regulatory milestones, on completion of which the facility, although still a 10 CFR Part 50 licensee, will represent a materials licensee temporarily storing and processing radioactive waste, rather than a commercial power reactor facility licensed to operate.

RESOURCES:

The transfer of the 13 plants from NRR to NMSS requires assigning NRR decommissioning budget resources to NMSS, as summarized below. This resource estimate applies to Regional and Headquarters direct effort; indirect effort will follow staffing guidelines.

	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>
Total Reassigned from NRR	11 FTEs	8 FTEs	8 FTEs
Headquarters FTEs	5	5	5
Regional FTEs	6	3	3
 Total Reassigned Monies from NRR (\$K, est.)	 84	 25	 25

The staffing associated with this resource transfer will be accomplished by voluntary reassignments and rotational assignments of appropriately experienced personnel, together with a cooperative NRR/NMSS recruitment effort, to fill vacancies in their respective staffing plans.

Implementation of the "road map" to transfer plants that shut down in the future, from NRR to NMSS, is captured within current staff project management responsibilities and need not be budgeted separately. This transfer will not affect the budget of NMSS' Spent Fuel Project Office, including that in the February 20, 2002, agreement between NRR and NMSS; on funding or resources for inspection of independent spent fuel storage facility installations. The staff does not foresee any operating commercial nuclear power plants electing to permanently cease reactor operations during the current budgeting cycle. However, for power reactors that permanently cease operation in the future, NRR will provide the regional inspection budget for the subject unit during the year it permanently shuts down through the first fiscal year in which the unit is transferred to NMSS. NMSS will fund all other budget allocations for project management or regional decommissioning activities.

COORDINATION:

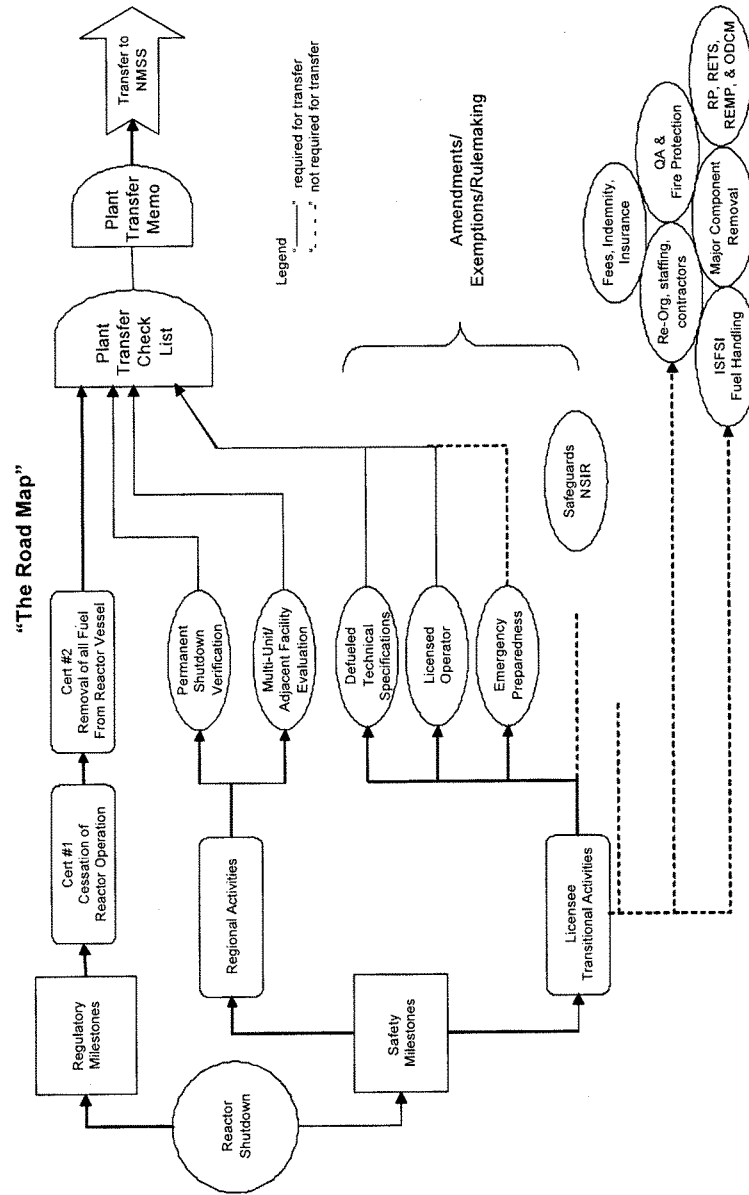
The Office of the General Counsel has reviewed this paper and has no legal objection to its contents. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

/RA/

William D. Travers
Executive Director
for Operations

Attachment: Transfer of Commercial Nuclear Power Plants
From NRR to NMSS, "The Road Map"

Transfer of Decommissioning Commercial Nuclear
Power Plants From NRR to NMSS



FRED UPTON, MICHIGAN
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MEMBER

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May 29, 2014

The Honorable William D. Magwood
Commissioner
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Dear Commissioner Magwood:

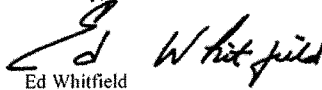
Thank you for appearing before the Subcommittee on Energy and Power on Wednesday, May 7, 2014, to testify at the hearing entitled "The NRC FY 2015 Budget and Policy Issues."

Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

To facilitate the printing of the hearing record, please respond to these questions with a transmittal letter by the close of business on Thursday, June 12, 2014. Your responses should be mailed to Nick Abraham, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed to Nick.Abraham@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Ed Whitfield
Chairman
Subcommittee on Energy and Power

cc: The Honorable Bobby L. Rush, Ranking Member,
Subcommittee on Energy and Power

Attachment



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

July 22, 2014

The Honorable Ed Whitfield
Chairman, Subcommittee on Energy
and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Whitfield:

Thank you for the opportunity to appear before the Subcommittee on Energy and Power at the May 7, 2014, hearing entitled "The NRC FY 2015 Budget and Policy Issues." By letter dated May 29, 2014, you provided additional questions for the record related to this hearing; my responses to these questions are enclosed.

Please do not hesitate to contact me should you or the members of your subcommittees have any additional questions.

Sincerely,

William D. Magwood, IV

cc: The Hon. Bobby L. Rush
Ranking Member, Subcommittee on Energy and Power

Enclosure

Additional Questions for the Record for Commissioner Magwood

The Honorable John Shimkus

1. The NRC has entered into a multi-year study on radiation impacts around nuclear power plants using National Academy of Sciences. In response to questions from the December 12, 2013, hearing, the Commission indicated "NRC staff realizes off-site radiation doses are unlikely to be addressed by this study." The Commission also indicated that one million dollars was spent on just the first phase of this National Academies study which: "confirmed the [NRC] staff position that, at the low offsite doses from these facilities, researchers would not expect to observe any increased cancer risks in the population surrounding these facilities attributed to the regulated release of radioactive effluents." The study itself confirmed that it will not advance understanding of radiation risk. Please explain why it is prudent for the NRC to spend upwards of another \$1.5 million to reconfirm what the staff and other studies already demonstrated.

ANSWER.

The agency made a determination that it is prudent to continue the Analysis of Cancer Risks Pilot Studies. Members of the public often express questions and concerns about health effects from living near nuclear facilities. To help address these public concerns, the staff uses the 1990 National Cancer Institute (NCI) report when addressing questions on cancer mortality in populations near nuclear power facilities. The staff relies on independent, credible health studies—including the 1990 NCI report—to augment its discussions about the NRC's robust regulatory programs to keep offsite doses as low as is reasonably achievable (ALARA) and to provide public health information that directly applies to the health outcomes that are often of concern (i.e., cancer). However, because the 1990 NCI report is now more than 20 years old, the NRC staff believes that more modern analysis methods, combined with up-to-date information sources, are needed to provide contemporary cancer information for current populations living near NRC-licensed nuclear facilities. While I share many of the concerns you raise, it is my expectation that the Commission will be able to monitor this activity as it progresses and take steps to assure that the agency's resources are appropriately utilized.

- a. Shouldn't NRC focus on the uncertainties the staff said are NOT addressed by these studies, to truly advance scientific and public understanding of radiation health effects?**

ANSWER.

a) The NRC focuses on many areas of radiation protection. While the NRC is not, itself, well-positioned to conduct the kind of scientific research you suggest, the agency funds, monitors, and actively participates in national and international research in radiation health effects to ensure the agency's system of radiation protection continues to adequately protect public health and safety. For example, the NRC supports the U.S. Department of Energy's Low-Dose Radiation Research program, which leverages multiple agency resources to analyze the cancer risks of nuclear power plant and industrial radiographer workers. These studies aim to quantify the cancer risks of workers with high career radiation doses when received slowly over an entire work-life. Scientific research of this nature is essential and should be pursued vigorously. As results become available, it is my view that NRC and other regulatory agencies should incorporate new knowledge into their policies.

- b. Are operating reactor licenses ultimately required to pay for these studies?**

ANSWER.

b) Yes. The NRC-commissioned study currently underway at the NAS is funded through NRC's fee-recovered funds.

The Honorable Lee Terry

- 1. You testified that you would be interested in potential legislative approaches to make fees more moderate. Please provide any suggestions you may have.**

ANSWER.

During the hearing, I testified that I am open to potential legislative approaches to make our fee structure more modern. Though our fee rule is regularly updated, the basic structure has been

unchanged for decades. While I am not committed to any one solution, I am open to considering changes that will update our fee structure and ensure that it reflects the current reality of our work and regulatory structure. It is my understanding that the NRC staff is currently in the early planning stages of a study that will examine the issue. The staff's study is expected to include consideration of internal adjustments to our fee structure, which would not require legislative changes, as well as examining the fee structures of other fee-funded agencies, which may require legislative changes. I look forward to learning the results of the staff's work, and in the meantime am open to suggestions from other sources of potential changes to modernize our fee structure.

